Are We Getting Our Message Across?

A Strategic Public Relations Metric for Multinational Organizations

For Presentation at the 14th AMIC Conference: Media and Society in Asia
Beijing, July 18 – 21, 2005.

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What is Strategic Public Relations?

An organization’s reputation, profitability and even survival can depend on the degree to which its targeted publics support its goals and policies. Public relations practitioners serve as advocates for businesses and other organizations to build and maintain positive relationships with the public. Public relations practitioners handle organizational functions such as media, community, consumer, industry and governmental relations; political campaigns; interest-group representation; conflict mediation; and/or employee and investor relations. They help an organization and its publics develop mutually beneficial relationships.

Thirty years ago, Lee Thayer, in the 1985 annual lecture sponsored by the Foundation for Public Relations Research and Education, summarized the strategic public relations function -- “vital information-communication-intelligence-strategic leadership.”

With recognition by organizations of the growing importance of good public relations to their success, public relations practitioners are increasingly relied on for advice on business strategy and policy. To be effective in this strategic public relations counseling role, public relations practitioners must be able to function at the highest levels of management and apply sophisticated strategic thinking to the accomplishment of organizational objectives. Practitioners must be able to demonstrate how well programs accomplished organizational objectives, and adjust programs for continued success.
We need metrics to be able to monitor our campaign or project progress. Metrics are evaluative measurements designed to help track progress. Many models of the public relations process evidence the evaluative measurement (metrics). Hendrix’s (2000) ROPE (Research, Objectives, Program, Evaluation), Marston’s (1979) RACE (Research, Action, Communication, Evaluation), Cutlip, Center and Broom’s (1999) four-step process (Defining PR Problems, Planning and Programming, Taking Action and Communicating, Evaluating the Program), Kendall’s (1992) RAISE (research, adaptation, implementation strategy, evaluation), Bobbitt and Sullivan (2005) (Planning, Implementation, Evaluation), MacNamara (1992) conceptualized a three-step process, (Identify your basic publics; Decide on communication methods appropriate to your “basic publics” and your objectives; Implement your own public relations program based on strategic planning.) Smith (2002) put forward a four-phase strategic planning process, (Formative Research, Strategy, Tactics, Evaluative Research.)

To summarize all of the models, after researching and analyzing the problem to determine how to effectively respond and setting objectives you want to accomplish, you execute a course of action. You measure the effectiveness of the executions and determine what needs to be done next.

**Background of Strategic Public Relations Research Leading to Development of the Investor Public Relations Navigator System™ (patent pending)**

This paper will summarize the current development of the strategic public relations evaluative measurement system developed by Dr. Ernest Martin, with specific application for publicly-traded multinational corporations.
Over the past few years, research has expanded in developing metrics and dashboards for evaluating public relations.

Dr. Ernest Martin teaches with the School of Mass Communications at Virginia Commonwealth University. He serves as Graduate Program Director and is one of the driving forces in the development of their Strategic Public Relations master’s program and an interdisciplinary Ph.D. in Media, Art and Text.

Martin’s research thrust is also at the leading edge of strategic public relations practice. He is developing evaluative measures and metrics to help real-time dashboard monitoring of the impact of public relations programs.

The foundations for the current developments date to research during the 1990s in the area of communication theory of high-speed management. The 1997 book chapter, “Lessons in Marketing Strategies during Recession from High-Speed Management to Sun Tzu's Art of War,” he lays out the foundation. “High-speed theory argues that the key to an organization’s success is making timely and appropriate adaptations to a complex and ever-changing environment, which spins off new opportunities and new threats. Alert companies monitor the environment for changes to be ready to grasp opportunities and make adaptations.” (Martin 1997)

With the explosion of media outlets (including traditional media such as newspapers and magazines) and new media (including internet distributed media such as on-line newspapers, newsletters and blogs), environmental scanning must also include “message discipline” – maintaining an effective and coherent message across all media. To evaluate the coherence of an organization’s messages in the media in a timely manner presents a major research challenge.
Martin developed a solution—a real time, statistically reliable system to measure coherence of communication activities across traditional and online media.

His research paper, “News Release Flow-Through: News Release/News Article LSA Metric” was awarded Top Faculty Research Paper by the Public Relations Division at the AEJMC 2004 conference in Toronto.


K.D. Payne’s Measurement Standard: The International Newsletter of Public Relations Measurement (http://www.themeasurementstandard.com/) continuously monitors and highlights positive developments in public relations evaluative measurement and metrics. Our strategic public relations new metric and approach was praised in the December 10, 2004 issue as “the best new idea in measurement.” They wrote: “After 18 years in this business, you think you’ve heard every new measurement metric anyone could think of, but Ernest Martin has come up with a new one that everyone in media analysis should pay attention to…. We sincerely hope that we see it widely adopted within the next few years.” http://www.themeasurementstandard.com/Issues/1104/eng/contents1104.asp

Research to extend the concept to financial communications, “Timing Retail Investor Communications with Wave Theory,” was presented at the Eighth International Public Relations Research Conference, Miami, March 2005.

This paper is the current system, combining previously researched elements into the Investor Public Relations Navigator System™, usable by publicly-traded companies in the global marketplace.
The Components and Process of the Investor Public Relations Navigation System™

(patent pending)

The IPRN System is a series of data processing, calculating metrics to provide directions for effective strategic communication with investors and other stakeholders via traditional and on-line media.

We call the system “navigator” because it is like the navigator used by ocean liners or aircraft to steer their courses. The navigator collects information from the environment, makes assessment of the situation, and gives directions with an objective to lead the vessel to the destination through the quickest and safest course. This is a good analogy of the function and operation of the navigator system.

Like the navigator, the IPRN System:

• Determines the most advantageous timing to increase media coverage and Internet mentions to reach potential investors,

• Monitors the level of media coverage and Internet activity using an “on balance media” metric,

• Provides an evaluative metric of the coherence of the key message with media articles and Internet information, and

• Provides an evaluative metric of the effectiveness of the news release information flowing-through to the reader of media articles.

Our objective has been to develop a system that can maximize effective strategic communication with investors via traditional and on-line media. Such a system is needed to direct corporations to initiate and manage strategic public relations campaigns that are appropriately targeted, timed, measured and evaluated.
Need for an Investor Public Relations

Investor Relations (IR), defined by the National Investor Relations Institute, is “a strategic management responsibility that integrates finance, communication, marketing and securities law compliance to enable the most effective two-way communication between a company, the financial community and other constituencies, which ultimately contributes to a company’s securities achieving fair valuation.”

Investor Public Relations (IPR) is vital to a company’s financial success, especially now that intangible assets – such as management quality, product quality, and innovativeness – comprise so much of a company’s worth.

The more a company makes investors aware of its existence and business strategy, the more likely it is to increase sale of its stock. Investors have a limited amount of time at their disposal. They will, therefore, invest in those companies they have heard of, are familiar with and can trust. When a company is willing to communicate, it decreases investors’ sense of uncertainty and risk. This is true for both institutional and retail investors.

Traditionally, the approach to IR is largely reactive with delegated people to respond to inquiries from analysts or investors as they come in. Additionally, the primary IR programs for most corporations target institutional investors. The methods of IR are, however, continuing to undergo changes in the wake of the global investment marketplace, scandals, revised government regulations and legislation, increased knowledge levels of investment community, new technology, and overall societal desires
for transparency and ethical business operation. The growth in the retail investor population serves as a catalyst for the demand.

In today’s environment, Investor Public Relations (IPR) provides significant advantages. It is a “proactive” approach to anticipate problems before they arise by continuously measuring, evaluating, and adapting.

**Emergence of the Retail Investors**

There are two broad shareholder groups – institutional investors and retail investors. Supporting each group is a variety of influential stakeholders, including analysts, financial media, etc.

A retail investor, also called individual investor or small investor, is an individual who purchases small amounts of securities for his or her personal account and not for another company or organization.

An institutional investor is an entity with large amounts to invest. They include investment companies, mutual funds, brokerages, insurance companies, pension funds, investment banks and endowment funds.

The primary IR program for most corporations target institutional investors. The majority of shares are held by institutional investors. Regardless of company size or sector, however, an effective Investor Public Relations program aimed at communicating to and supporting a company’s retail investors can be an important adjunct to the primary IR program targeting institutional investors.

Over the past few decades, individual investors have acquired a larger role as primary providers of capital. The rise in the scope and reach of U.S. private equity ownership has been striking.
In the last 50 years, investors have gone from fewer than 3 million owners of publicly traded companies to more than 85 million owners. In 2002, approximately half of U.S. households own equity, up from 19 percent in 1983. Projections are for stock investing by individual households to rise to 74 percent by 2009. (Dent, 2004)

Retail investors also have significant value for a company. Given the large market size, long term holders, low turnover, shareholder loyalty and reduction of concentration of ownership, the retail investor segment is very attractive.

There are difficulties, however, in designing and launching IR programs for retail investors. One can imagine the cost needed to resolve all the problems.

- Cost of marketing.
- Cost of servicing.
- Time required to attract a significant holding.
- Geographically diversified market.
- Difficulty of reaching a concentration of real investors.

The solution to these difficulties is a system that effectively uses media. The way to reach retail investors is a series of media campaigns, launched at the right time, with the right message.

**Components of Investor Public Relations Navigator System™ (patent pending)**

The following diagram highlights the IPRN System (see Figure 1. Investor Public Relations Navigator System™ (patent pending).) The dashboard is a real time view of metrics from various modules. Key message strategy/pre-testing and investor wave timing modules feed into campaigns (and campaign revisions) for institutional investor /
analysts and retail investors. Key message coherence metric and news release flow-through metric are evaluative measures displayed on the dashboard. 

Dashboard

The dashboard is the display unit of information and data of the IPRN System. The data is displayed in the form of charts.

The sources of information and data are a) those collected from the market, including high, low open, close of share prices and share volume; and b) from calculations generated from metrics within the system, including on balance volume and on balance media.

The dashboard will also display alerts of the timing for initiating IPR programs.

Key Message Strategy/Pre-testing Module

A key message is the specified kernel of information to be incorporated into every media mention of the company. For an effective media campaign, the key message must be clear and target focused.

Key message strategy and pre-testing is done before the retail investor media campaign is triggered by the investor wave timing. For example, key messages for analysts, institutional investors and retail investors though seemingly similar, are actually unique.

By pre-testing, you can be sure you are on point with your message.
Investor Wave Timing Module

Increased news presence, appropriately timed with a wave of retail investors into the market, sustains investor confidence and drives the length and intensity of the rally.

The theory that stock prices move in waves reflecting investor psychology is well-known in financial markets. (Prechter 2002) Wave theory constructs five wave-like motions – three in the trend direction and two which are opposite (see Figure 2. Basic Wave Pattern).

When a stock hits a low point in the market, the general feeling among investors is of unhappiness. People are afraid to purchase. There is, however, always a small minority of people who believe that this is the time to buy. They look for the “bottom” that gives them the edge of “buy low.” They have a higher risk tolerance and are taking advantage of other people’s fear and vulnerability. Their action of buying at the low induces the first market rise - creating Wave 1.

As the stock begins to rise, most investors still feel negative and stay out. Those who bought “low” after the previous decline will be anxiously watching the market. Because they believe that the future equals the immediate past, they are very concerned about the short-term future. When the stock makes a short-term top and starts to decline again (Wave 2), they become very anxious and sell quickly in order to try to gain something rather than nothing. They are quick to get out.
The downward trend of Wave 2 usually does not go all the way down to where it was before. When people notice that the share price is not going down to new lows and that it is starting to rise, large institutional investors start to invest again. The market rises again on the third wave. Wave 3 has the heaviest buying of institutional investors.

Wave 3 is generally considered to be the point of recognition for retail investors. Some retail investors come in late in Wave 3.

Usually Wave 4 is a high level consolidation rather than a sharp drop. Profit taking occurs for some institutional investors who entered early in Wave 3. The investors, often retail investors, who bought late during Wave 3, lose out the most.

Other retail investors, who recognized the stock in Wave 3 but didn’t buy, see the high as consolidation occurs. The downward move of Wave 4 makes the stock price look inexpensive. The “cheap” stock becomes tempting because of the heavy gains seen in Wave 3.

Then comes Wave 5. This is the wave where many retail investors start investing because everyone else seems to be making a lot of money. And they don’t want to miss out on “buy low and sell high.” When the fifth wave forms the peak and tops out, it makes its largest and most dramatic drop yet. The power (increase) of Wave 5 is largely dependent on the strength of the retail investment confidence.

The best case for a company is for Wave 5 to extend well beyond Wave 3. Sometimes, however, Wave 5 truncates or falls apart after a short rise. This occurs with weak retail investment. If the wave extends, substantial additional retail investors will come into the company’s stockholder investor pool. The sustainability of the rally is largely dependent on retail investor confidence.
In a paper presented at the Institute for Public Relations, 8th Annual International Public Relations Research Conference, results of a test matching news stories for 50 stocks completing wave 5 were reported. The question was: can we time news coverage to sustain Wave 5 maximum strength?

Our hypothesis was that higher media coverage will maintain a quality retail investor wave significantly longer than lower media coverage. The research strongly supports that timing a campaign to coincide with the start of Wave 5 will strengthen it up to 5 times. Sophisticated media timing can create a retail investor tidal wave pushing a powerful force higher and higher.

Here are some examples demonstrating the research conclusions. First is an example from UPS of a strong retail investor wave (see Figure 3, UPS Strong Retail Wave.)

Notice how Wave 5 with retail investors is even stronger and longer than Wave 3 with the early institutional investors. We developed a metric of “on balance media” to graphically demonstrate media coverage buildup. Stock analysts use a technical indicator called “on balance volume” (OBV), constructed by adding the period’s volume when share price is up for the period or subtracting the period’s volume when share price is down.

We constructed the algorithm of “on balance media” (OBM) to show timing of media mentions. As with OBV, we add the number of media mentions when share price
is up for the period or subtract the period’s media coverage count when share price is down.

The indicator shows that the OBM builds a “mountain” of coverage as the wave extends. The OBM will flatten as a peak is reached. For a strong, extended retail wave, the “mountain” must begin building timed with the start of the retail investor wave.

UPS demonstrates a strong retail investor wave. Note that the coverage “mountain” begins building approximately at the start of Wave 5 and builds until it flattens – followed after a few days by the end of Wave 5.

The second example is LFC with a very weak retail investor wave (see Figure 4 LFC Weak Retail Wave.)

LFC has minimal media coverage but a very strong IR program for institutional investors. Not surprisingly, LFC has a very strong Wave 3, relatively sharp profit-taking in Wave 4 by a large number of institutional investors, and a collapsed Wave 5. The attempt to build a “mountain” was too little, too late as the stock began to trade in a channel, losing out on the natural flow and psychology of the market. The opportunity lost is approximated by the trend channels.

While most investor relations programs are aimed primarily at institutions, these findings provide a strong argument for effectively communicating company news to retail investors. Timing media activity with retail investor patterns can play an important role in supporting long-term stock prices and shareowner value.
Martin’s wave theory research has been summarized in PR News (May 11, 2005) and is available at www.instituteforpr.com.

**News Release Flow-through Metric module**

Now let’s talk about the module for determining how much information from our news release gets through into the news article. This is about constructing the news release flow-through metric.

Getting the message from a news release to a reader or viewer via a news source is a strategic task for public relations practitioners. The objective of media relations, quite simply, is to affect media – to get our skillfully crafted message into a news article or story in a comprehensible way for the reader or viewer.

To be able to measure the degree to which a news release is included in a news article, one has to go beyond the occurrence of the “exact words.” Rather, the contextual or semantic relatedness of the pieces of text has to be examined.

We have developed a statistically reliable metric for measuring the degree to which particular news article or story impacts a particular news release.

It uses a statistical technique called latent semantic analysis (LSA) to measure semantic relatedness of news releases in corresponding journalistic articles.

During the past few decades, cognitive scientists and computational psycholinguists developed LSA as a statistical model for comparing semantic similarity of units of text to each other.

Originally LSA was designed to improve information retrieval methods by performing retrieval based on derived “semantic” content of words in a query (e.g. “Googling”) as opposed to performing direct word matching.
The theoretical assumption is there is some underlying or “latent” structure in the pattern of word usage across documents. Meanings of a word modify as we use a word in different contexts. Similarly, different words sometimes have the same meaning depending on contexts.

The aggregate of all the word contexts in which a particular word does, and does not, appear provides a set of mutual constraints that reflects the similarity of meaning of words to each other.

In previous research, we did tests of the feasibility of the metric. (Ernest F. Martin, Jr., “News Release Flow-Through: News Release/News Article LSA Metric” Presented at the Association for Education in Journalism and Mass Communication (AEJMC), Public Relations Division, Toronto, August 4, 2004.)

In the tests, matched news releases and news articles were compared. The articles were written by the journalist, paraphrasing rather than quoting from the news release. We found that the metric, based on a statistical process called latent semantic analysis, scored release/story relatedness on underlying semantic structure rather than word matching. It demonstrated that the metric can provide measurement of relatedness of the source news release to the target news article.

In another exploration, a wide range of news releases and news articles were selected. We wanted to see if LSA could provide a useful relative score, showing the degree of semantic relatedness of a news release and a news article. From the topic-related news releases/news articles selected, the range (.67 - .85) demonstrated a level of discrimination for the metric.
This exploratory study had semantically related measures in the .60’s, .70’s and .80’s, tentatively defined as weak, medium and strong relatedness or coherence respectively.

**Key Message Coherence Metric**

As previously mentioned, the key message is the specified kernel of information to be incorporated into every media mention of the company.

Research found an automated, statistically reliable metric for measuring the relatedness of desired outcomes or objectives across educational programs. (Ernest F. Martin, Jr. “Assessment Outcome Coherence Using LSA Scoring” Academic Exchange Quarterly, fall, 2004)

We apply the same technique to measure the relatedness of the targeted key message of IPR campaigns to the media coverage. In general, higher levels of key message coherence across a campaign is critical for success.

The key message phrase or word series is analyzed within the context of media coverage, yielding a single metric for evaluative tracking. The finding shows .80 or higher is excellent; .70 - .79 is good; .60 - .69 is fair; .59 or below means the key message did not get through.

**Process of Investor Public Relations Navigator System™ (patent pending)**

As mentioned in the introductory description section, the system is a tool for Investor Public Relations. The system generates indicators for actions the way the navigator indicates a direction. The corporation then follows the co-ordinations calculated by the system. The steps underlined are the corporations’ response to the calculation of the system.
Step 1 Inputting of data

For a corporation using the IPRN System, continuous inputs real time information of:

- Stock price data
- Stock volume data
- Traditional media and Internet story counts (mentions)

Step 2 Charting

Input data is continuously structured into graph forms:

- Stock price in market chart (high, low, open, close)
- Volume in “on balance volume” chart. In an “on balance volume” chart, volume of a period is added to the previous level for every period when stock price is higher and volume is subtracted from the previous level whenever the period has a lower share price.
- Mentions in “on balance media” chart. On balance media adds mentions to the previous level for every period when the stock price is higher than previous period and subtracts mentions from the previous level whenever the period has a lower share price.

Step 3 Investor Wave Timing Calculations

The purpose of this step is to identify the best timing for initiating or adjusting public relations media campaigns for investors.

- Identify the beginning and ending of a wave pattern.
- Based on wave counts, the time periods with impulse waves heavily populated with retail investors or those waves heavily populated with institutional investors are determined and displayed on the stock high, low, open, close chart.
• Metrics are calculated to continuously monitor the traditional media and Internet information.

Step 4 Timing Alert

• Once a point for IPR campaign is identified, an alert is sent out on the dashboard.
• The campaign (or campaign adjustment) is initialized.

Step 5 New release flow-through calculation

• As news releases are distributed and news articles emerge, texts of each are input into the system and statistically compared for semantic similarity.
• The metric, on a scale from .0 to 1.00, is displayed on the dashboard.

Step 6 Key Message Coherence calculations

• Input the company’s key message phrase or word series from media and internet mentions
• Data is analyzed within the context of media coverage, using the key message coherence metric
• a single metric for evaluative tracking is generated
• The metric, on a scale from .0 to 1.00, is displayed on the dashboard.

Step 7 Adjustments to previous IPR programs

• Based on the assessment metric generated by the key message coherence metric and news release flow-through metric, determine the need for adjustment to the IPR program.

Two Examples for Publicly-traded Multinational Corporations

China Unicom Limited is listed on the New York Stock Exchange and the Stock Exchange of Hong Kong. The Group's principal activity is the providing
telecommunications services which include cellular communications, paging, international and domestic long distance, data and Internet services. It is engaged in the cellular business in 30 provinces, municipalities and autonomous regions in China through China Unicom Corporation Limited and Unicom New World Telecommunications Corporation Limited. As to its cellular business, the Company is one of the two mobile telecommunication operators in the PRC. As of 31 December 2004, there were 112.081 million subscribers to the Company's GSM and CDMA cellular businesses. In terms of the number of subscribers, the Company was ranked as the third largest mobile telecommunication operator in the world. The number of the Company's CDMA cellular subscribers reached 27.814 million and the Company was ranked as the second largest CDMA cellular operator in the world. The Company has constructed the second largest broadband optical fiber transmission network with nationwide coverage in the PRC. This network serves as a shared platform, which supports the operation of cellular business, international and domestic long distance calls, data and Internet and this sound network resources serves as a good support for the rapid development of the Company's various businesses.

The NYSE ADR chart for China Unicom shows a very weak retail investor wave (see Figure 5, CHU Weak Retail Investor Wave).

CHU had strong institutional investors in Wave 3. There was sharp profit-taking in Wave 4, bringing levels far beyond where Wave 4 retrenchment should have been.
When Wave 5 began, the “mountain” spiked and then dropped precipitously. With no mountain of coverage to support possible retail interest, Wave 5 never got off the ground.

The impact of appropriate timing can be significant. Figure 6 shows the projected trend channels with a strong retail investor wave.

The second example is of a Wave 5 which begins moving through natural flow, but does not have enough momentum to break through the resistance level established with the high of Wave 3 (see Figure 7. CEO Wave 5).

CNOOC Limited is a Hong Kong-incorporated public company that engages primarily in the exploration, development and production of crude oil and natural gas offshore China. The New York Stock Exchange ADR stock symbol is CEO. They are the dominant producer of crude oil and natural gas and the only company permitted to conduct exploration and production activities with international oil and gas ventures offshore China. The Company is also one of the largest offshore crude producers in Indonesia.

When looking at the waves, a very strong Wave 3, indicating excellent institutional investor activity, is followed naturally by profit-taking and Wave 4 consolidation. The natural rhythm of the previous waves began the initial rise of Wave 5.
On balance media, however, shows that there were increased news articles during the Wave 4 consolidation. The company did not begin building the mountain of coverage as the natural movement of Wave 5 started. This probably meant that retail investors were not a significant part of Wave 5, and could not provide the momentum to extend the Wave 5 increase.

Opportunity was lost to extend the retail investor Wave 5 (see Figure 8 Projected CEO Wave 5 Extension.) Projected Wave 5 trend channels are shown.

Conclusion

In today’s public relations environment, strategic public relations must include a strong evaluation measurement phase. Dashboard metrics provide public relations practitioners the opportunity to monitor and adjust campaigns to maximize their effectiveness.

This paper outlines the research and measurement system for investor public relations. Developmental research for the system is summarized and the components of the Investor Public Relations Navigator System™ (patent pending) are discussed. The dashboard is a real time view of metrics from various modules. Key message strategy/pre-testing and investor wave timing modules feed into campaigns (and campaign revisions) for institutional investor / analysts and retail investors. Key message coherence metric and news release flow-through metric are evaluative measures.
displayed on the dashboard. Finally, the timing metric is applied to two multinational publicly-traded companies.

Beyond the direct utilization for investor public relations programs by publicly-traded companies, the implication for public relations practice is that some media relations campaigns can be timed to coincide with when stakeholder groups are most open to the information. Advertisers have long used product seasonality and other cyclical patterns for advertising placement. Public relations can begin to develop comparable use of patterns for timing media campaigns.

**Bibliography**


National Investor Relations Institute. “Mission and Goals”

http://www.niri.org/about/mission.cfm cited May 31, 2005


Figures 1-8

Figure 1 Investor Public Relations Navigator System™

Figure 2 Basic Wave Pattern
Figure 3 UPS Strong Retail Wave

Figure 4 LFC Weak Retail Wave
Figure 5 CHU Weak Retail Investor Wave

Figure 6 Projection of Strong Retail Investor Wave
Figure 7 CEO Wave 5

Figure 8 Projected CEO Wave 5 Extension