Collaborative Early Warning

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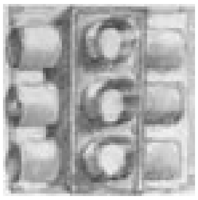

FOREWORD

At SCIP05 in Chicago this past spring, I teamed up with Jordan Frank to deliver an interactive conference session called "Collaborative Early Warning" which used weblogs to create a "Wisdom of Crowds"-like early warning (EW) system around a fictitious pharmaceutical case example. The case involved the commercialization of compounds controlling the expression of an newly discovered enzyme, TAM-3, that (in our fantasy exercise at least) was shown to be a leading long-term agent in development of ocular myopia (nearsightedness).

At the end of our 120 minutes, we had taught the fundamental principles of early warning while also constructing a weblog to profile the key players and forces in the marketplace and create tripwires to guide recognition and action on patterns that might develop, including functional equivalents and analysis of alternative or emerging substitute therapies, fast-growth markets, and other high-impact forces on the business strategy. Since then, my colleague Derek Johnson, Aurora's director of research and analysis, has taken the reins of this project and co-authored with Jordan this guest column below.

Arik Johnson, Aurora WDC
Managing Director

COLLABORATIVE EARLY WARNING

Military agencies use signal intelligence to discover and predict enemy movements on the battlefield. Intelligence agencies rely heavily on electronic surveillance to monitor and anticipate activities and movements of enemy groups large and small.

But most corporations rely purely on tracking open source news, patent, and website information to monitor information their competitors make available. Are corporations being ethical to a fault or just operating with blinders on in their regard of the outside world? Are they making the best use of key information that is housed inside the heads of their employees? Chances are, they are not.

Collaborative early warning, as a dynamic and interactive platform of sharing ideas and insights regarding your competitive landscape among your colleagues and your stakeholders, has three key ingredients:

- defined information objectives and prepared responses
- signal sensing – activating sensors to capture market activity
- predictive intelligence – using analytical methods to discover trends and forecast movement

In medium to large organizations, intelligence is scattered among the many arms of disparate and increasingly disconnected departments, regional hubs, and business units. Effective business planning and competitive response requires the return of this information and some form of technology assistance to re-assemble the whole from its parts. Enterprise blogs provide a very powerful backbone to enable signal sensing and collective competitive assessment across social networks.

SIGNAL SENSING AND PREDICTIVE INTELLIGENCE

Whether you run a hardware store or a big pharmaceuticals company, competitive advantage relies on the sophisticated collection of target market knowledge and a planned, resourced response to adverse or opportunistic events. The chief difference between the owner of the hardware store and the president of a big pharmaceutical company is a matter of scale and the resources required to succeed. Perhaps small-time operators have an advantage in this respect – they must make do with what they have, and the lack of complexity itself could be a decided advantage in achieving success!

"Tom's Hardware and Cones" is an example that illustrates the point on a small scale. Town officer, friend to all and local legend, Tom has been able to fend off local competition for decades. This hardware store owner can almost single-handedly remain aware of activity on his block and across his town.

Tom's ultra-long-term competitive edge further comes from his ability to ask What If? questions such as "What if superstores come to the edge of town?" and So What? questions. For example, should Tom double his square footage to add an ice cream parlor, an offensive aimed at attracting families who'd forego a good deal at Wal-Mart in order to give their kid a treat (and diversion) while they pick up a hammer, some fishing line, a pack of diapers, and an emergency plunger?

INFORMATION EXCHANGE BARRIERS

When an organization grows into the hundreds or thousands of employees, intelligence tends to become decentralized and diffuse in scope, while other company core capabilities tend to scale up in size. Decentralized intelligence often becomes distributed and disconnected. Expertise becomes focused in discrete areas rather than spread across teams. As they grow, small business cultures that require the fast, free flow of information can turn into cultures of information-hoarding and less personalized private silos.

One standard explanation is that workers see information equating to power and hoard it as a resource to help ensure their long-term indispensability. However, as organizations grow, people begin to hoard information for other reasons as well. These information exchange barriers exist because individuals:

- Don't want to bother colleagues.
- Don't recognize the value of their information.
- Don't have anywhere to write it down.
- Don't want to violate departmental or other management boundaries which may dictate for whom it is appropriate to speak about what.
- Don't see the act of sharing information as a part of management objectives so it appears as a waste of time and energy.

With growth, an organization's neural pathways connecting the decision-executing cognitive center from the frontline fingertips can atrophy and darken, for no other reason than the distance separating market forces. The executive suite receives what shareholders say they want from the market: current revenue and forecasts.

What's missing is what they need as their shareholders' executors of the business: detailed information and the necessary context to develop insight about what to do next as an organization. Signal sensing sputters as organizations grow, and bigger decisions are made with less and less context.

BUILDING COLLABORATIVE ENVIRONMENTS

When you were a child, a teacher probably asked your class how many jelly beans were in a jar on his desk and then demonstrated that, while nobody guessed correctly, statistically you're still able to find a mean or median number that is fairly close to depicting reality. When focused on the same problems, the collective power to predict outcomes is greater than the sum of the individual parts.

Corporate blogs allow this dynamic truth to cross otherwise impassible physical barriers and create collaborative environments where company teams can do the same thing as the classroom of students – collectively predict reality more accurately and effectively than any single individual. By harnessing this capability throughout an enterprise, the scope and scale of these insights can create actionable intelligence for your firm, large or small.

In an organization spread across the globe (or even bisected by cubicles), blogs can re-build a collective, collaborative early warning environment. When encouraged by upper management and properly deployed, blogs serve to break down at least four of the information exchange barriers. A blog's simplicity offers the ability to:

- Write ideas or information down easily.
- Distribute it in whole or at the granularity of a key word.
- Recognize information for its value in self-forming ad-hoc communities of interest.
- Be recognized as a key contribution to market visibility and decision support for upper management.

WEBLOGGING

Weblogging – or blogging – has roots that date back long before the Internet itself. It developed into a collaborative communications medium, leaping to center stage around the time of the 2004 U.S. presidential election. Suddenly, the *collective consciousness* of research, analysis, and citizen journalism disrupted the career and market prospects of journalism's stalwart powerbrokers, including CBS and the *New York Times*, and ranging from Dan Rather to Howell Raines.

In a climate of unprecedented scrutiny, issues of corporate governance and the predictability with which business conditions can be anticipated are important to shareholders as well as the regulators who guarantee the solvency of their assets and investments. As a consequence of the need for greater forward-looking visibility, the factors affecting early warning capabilities also affect the ultimate ability of any organization to create sustainable and ongoing competitive advantage.

This is true whether a company's securities are publicly traded and the board of directors is left to answer to shareholders, or a management team leads a smaller firm that is forced to compete with more local competitors looking to steal market share. Those endeavoring to supply such increased foresight of market conditions, in the face of zero-sum competitors and new or disruptive forms of innovation-driven competition alike, can provide your organization with a unique and valuable perspective in terms of being more competitively effective and efficient.

Trend-watchers call blogging and early warning *mega-trends*. When they intersect and multiply one another's power, mega-trends create powerful momentum for change.

MANY-TO-MANY INTERACTION

Collaborative technologies, with many-to-many interactivity across an entire organization (or even beyond through the full value chain), can furnish chronologically oriented, issue-driven collective knowledge sharing. The velocity of communication itself can align a disjointed human network and concentrate an organization's various markets. Early warning and key intelligence topics (KITs) monitor, track, measure the impact of, and prepare hypothetical and countervailing strategies for any episodic and periodic events that might come from competitors, customers, and less perceptible market forces as well.

In defining KITs, you must know what outcomes you are trying to predict and what actions you will take to confront those opportunities or challenges. A blog network can serve as a common core of market information and assist in developing KITs, becoming a principal catalyst to signal those KITs to the field and close the loop. The channel can also serve as a channel for both raw and group synthesis of return information and alternative recommendations for action.

EARLY WARNING CASE STUDY

For example, in our collaborative EW case study, we examined three differing points of view to address strategic, tactical, and operational goals in the market for an illness previously thought to be untreatable. In it, three very different organizations (teams) must address a therapeutic approach for inhibiting the disease based on the provided background information. At the same time, developments from the market impact strategies and affect the evolution of EW and KITs and the organization's potential competitive response to them. Information challenges the assumptions, forcing the groups to question and adjust plans.

Information contributed and discovered in the early warning process alerts your management and alters your business model's assumptions. It begins to deflect each organization's competitive intelligence program away from its direct rivals and toward value creation. Early warning focuses CI more toward alternative approaches to providing the same value – *functional equivalency* – of each company's unique core competence in the target markets under consideration. Processing this developing information together, teams also gain insight from diverse outside groups that are peers within the same organization or a competitor. Additionally, players become better equipped to recommend how their firm might mitigate the threats and exploit the opportunities to enable and create greater shareholder equity for their organization's constituents.

WHAT IF? SO WHAT?

The old CI approach of encouraging research and analysis to focus on the So What? falls short of addressing all the critical issues impacting your business. We must first focus on another question: What If? The What If? question focuses the collaborative organization on key questions which are central to advancing the business model:

- What if a commonly available ditch weed has the same or similar effect as our protein-inhibition therapy?
- What if the cost of our therapy is nominally inelastic in comparison with existing, though less appealing, treatments for the same condition so as to prevent our otherwise disruptive innovation from creating a new market?
- What if a repressive government in one of the fastest growing geographic markets we've targeted for growth decides to regulate our product so greatly the business model becomes less and less attractive and the time to recover our R&D investment is irreconcilably extended?

These questions are addressed every day by pharmaceutical and biotech companies whenever they go to market. With an investment approaching one billion U.S. dollars to market a drug, the ability to predict threats and opportunities is more important than ever, especially when true blockbuster drugs can be worth tens of billions in lifetime revenue before generics sap their profitability.

However, these dynamics are not unique to markets for healthcare or drugs. Whether you are developing luxury automobiles or vitamin-enriched chewing gum or delivering data services to a new media device, you rely on information and intelligence to make decisions about price, product -positioning, place, and promotion. These are universal issues, often best represented by their application to a particular market.

But for now, most of what we can offer are questions rather than cures. Instead of focusing all of your attention on the So What?, be sure to give at least equal contemplation to the What If?

Derek Johnson is chief operating officer and director of Aurora's ReconG2 Research & Analysis Support Bureau, where he's responsible for oversight of all client engagements in terms of overall quality control, project management and staffing decisions. He holds an MBA and a BBA in finance and economics from the University of Wisconsin, in addition to being a Chartered Financial Analyst. Derek can be reached at Derek.Johnson@AuroraWDC.com.

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