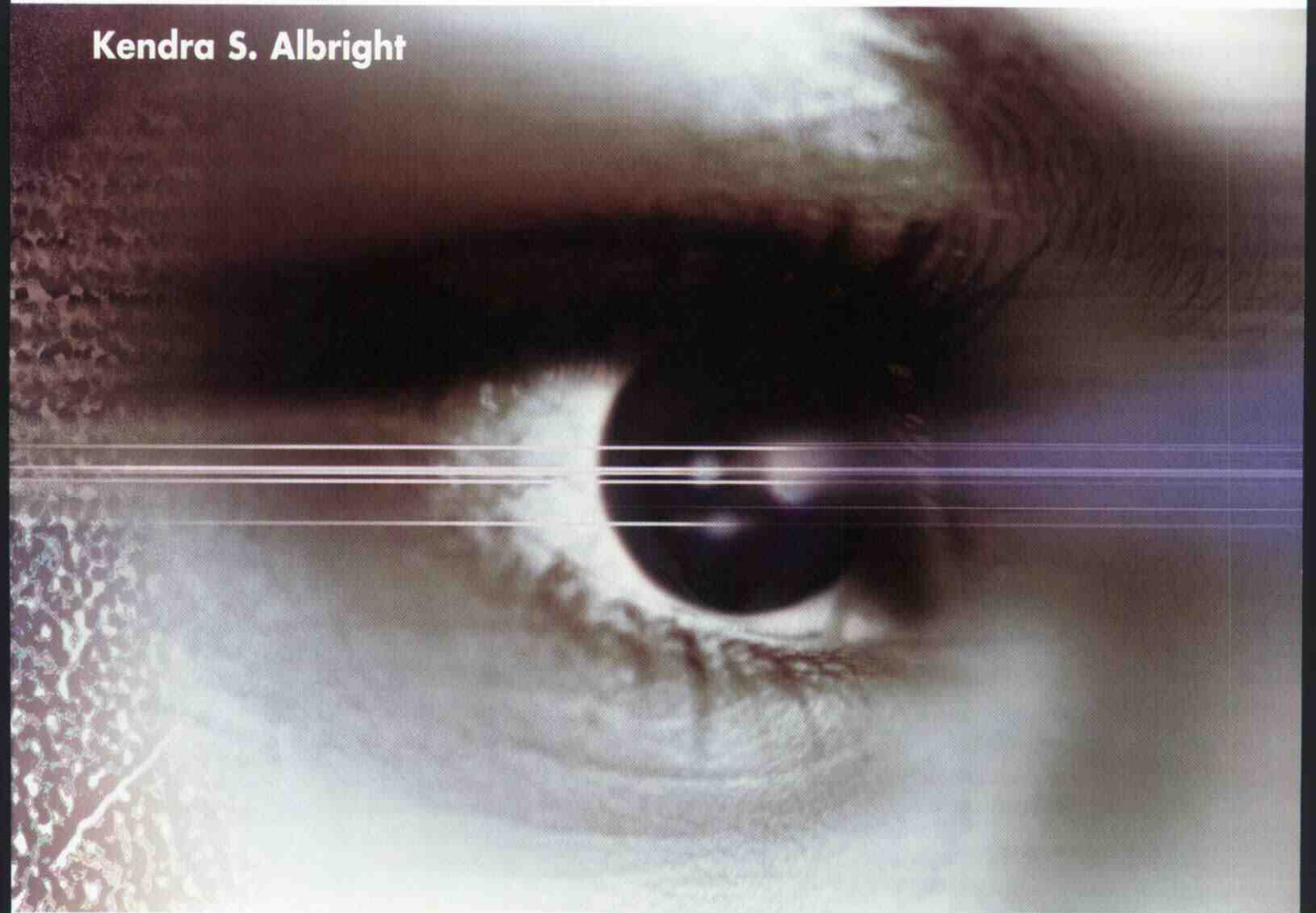


ENVIRONMENTAL SCANNING: RADAR FOR SUCCESS

Kendra S. Albright



Environmental scanning – the internal communication of external information about issues that may influence an organization’s decision-making process – can identify emerging issues, situations, and potential pitfalls that may affect an organization’s future




At the Core

This article

- defines environmental scanning
- explains why it is vital to an organization's strategic planning
- describes the process involved in environmental scanning

Organizations today face unprecedented challenges in maintaining commercial survival and success. This is true for organizations both large and small, for-profit and non-profit. Success requires a keen strategic understanding of external influences in order to respond in ways that will ensure the organization's survival and success. Environmental scanning is one tool in an organization's arsenal that can be used to gain this understanding.



Environmental scanning helps to focus the organization's strategic and tactical plans on those external forces that may threaten its stability and turn those potential problems to its advantage

What Is Environmental Scanning?

Environmental scanning is the internal communication of external information about issues that may potentially influence an organization's decision-making process. Environmental scanning focuses on the identification of emerging issues, situations, and potential pitfalls that may affect an organization's future. The information gathered, including the events, trends, and relationships that are external to an organization, is provided to key managers within the organization and is used to guide management in future plans. It is also used to evaluate an organization's strengths and weaknesses in response to external threats and opportunities. In essence, environmental scanning is a method for identifying, collecting, and translating information about external influences into useful plans and decisions.

Why Environmental Scanning?

There are many important reasons to do environmental scanning. Because of rapid changes in today's marketplace and new and emerging business practices, it is easy for an organization to fall behind by not keeping up in areas such as technology, regulations, and various rising trends. Environmental scanning reduces the chance of being blindsided and results in greater anticipatory management.

The relationship among markets, strategic planning, and the environ-

ment external to an organization is what defines an organization's success. As external forces are identified, organizations have the opportunity to examine their options in response to the challenge and consider their internal strengths and weaknesses to respond to these challenges.

According to John D. Stoffels' *Strategic Issues Management: A Comprehensive Guide to Environmental Scanning*, environmental scanning allows an organization to address external competitive, social, economic, and technical issues that may be hard to identify and are persistent. Specifically, its intent is not merely one of information gathering; rather, its purpose is to focus on future impacts on the organization rather than those centered on the present situation. Environmental scanning helps an organization learn about the potential influences from external environments and how it can respond strategically. Through understanding these two elements – external influences and the organization's internal processes – the organization can respond in a more timely and effective manner.

The focus of environmental scanning is on strategic thinking and planning. Its value comes from the identification and understanding of complex issues facing the organization. Environmental scanning helps an organization form a strategic position from which it can address external forces over which it has little, if any, control. Through consistent monitoring of external influences,

organizations can shape their own internal processes to reflect necessary and effective responses. The process of understanding the match between external influences and internal responses assists in adjusting organizational structure and strategic plans that are designed to be more effective and flexible to changing market forces. Thus, the successful organization is focused on learning as well as on flexibility and responsiveness.

Environmental scanning is not a stagnant process. It should be constant and ongoing in order to maintain a preparative stance as environmental influences arise. This organizational learning process is a key component to organizational success. Through constant monitoring of the environment, management has the ability to make necessary adjustments in the organization's response that can mean the difference between success and failure.

External Environments

There are several external environments that may impact an organization. These can be grouped into categories including social, regulatory, technological, political, economic, and industry. [See "External Environments Impacting the Modern Organization" on page 42]. Influences of each can negatively affect an organization, resulting in poor performance or ultimate failure. Of these environments, as Chun Wei Choo notes in *Information Management for the Intelligent Organization: The Art of Scanning the Environment*, the industry's environment is the most significant, with its focus on customers, suppliers, and competitors and their intricate relationships.

It is increasingly vital to the continued growth and improved performance of an organization to monitor these external environments in order to make necessary adjustments to these influences. Environmental scanning offers a process by which the value of an

organization may be maintained or enhanced even in the face of adversarial challenges. Environmental scanning helps to focus the organization's strategic and tactical plans on those external forces that may threaten its stability and turn those potential problems to its advantage. An organization manages this process by identifying and examining those external events that may otherwise be unpredictable and uncontrollable. The process assumes that potential impacts on the organization may come from unexpected sources. Therefore, environmental scanning is integrally linked to organizational and strategic planning and plans for unexpected changes that will affect the organization.

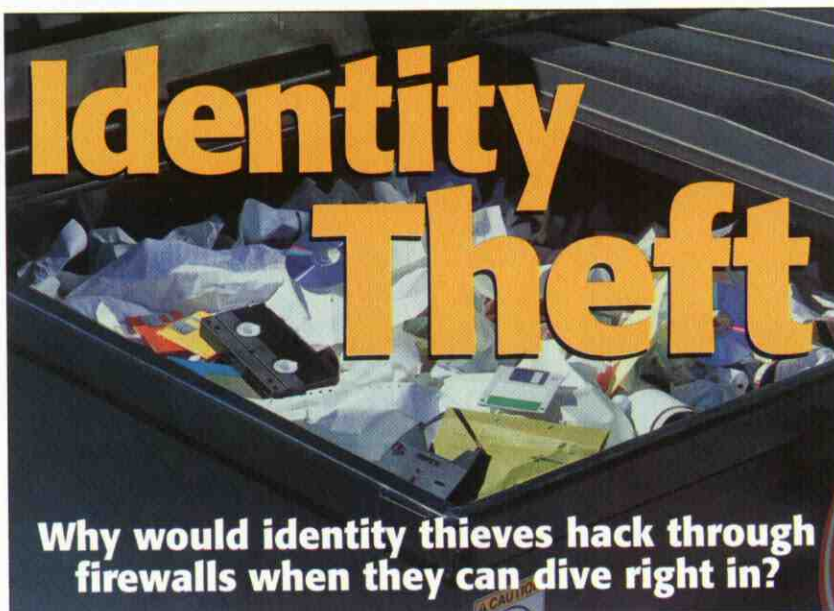
Environmental scans must be conducted on an ongoing basis in order to effectively monitor external forces that are likely to impact an organization. Issues for each of the external environments should be explored. A comprehensive environmental scanning process will keep a watchful eye on the potential impacts of the following different environments:

- **Industry/Market:** Because the industry/market environment generally seems to be the most significant, it is useful to examine the structure of the industry and identify the key competition in the industry. Understanding the role of the competitors in the market and their relationship with each other, their customers, and their suppliers will provide useful information on trends and potential problems for competing organizations.
- **Technology:** The emergence of new technologies can impact organizations' overall business and production processes. It is useful, therefore, to monitor changes in technologies, particularly those that influence business efficiencies, changes in produc-

tion, existing infrastructures (e.g., energy, transportation, and communication), and the rise of new products or services.

- **Regulatory:** Changes in laws and regulatory guidelines may also have a significant impact on the organization. Communications media ownership laws, for example, can have dramatic effects on the numbers of

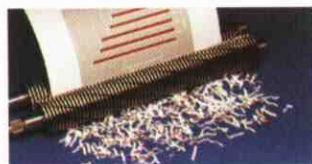
stations one owner may have, thereby potentially affecting the overall market structure and market share. Laws regarding minimum wage and business taxes can have direct bearing on hiring practices within an organization. Regulatory information on employment practices, intellectual property, and those that are industry-specific are important to consider.



Identity Theft

Why would identity thieves hack through firewalls when they can dive right in?

Identity theft is America's fastest-growing crime, affecting an estimated 700,000 people a year in the U.S. alone. Theft of company records is the



leading source of identity theft and, by law, the company is responsible for any information about its employees or clients that leaks out. Trusting an outside firm to dispose of your confidential data for you

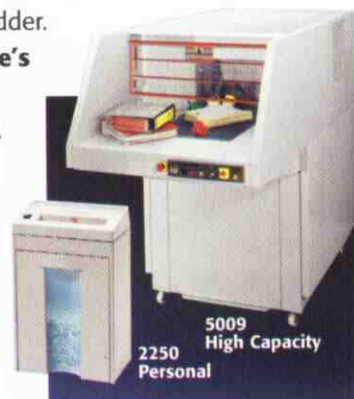
is not the answer. The surest way to protect your company from identity theft is to shred sensitive documents at the source—in the tempered steel cutting heads of a Destroyit® shredder.

With over 50 models available, there's a Destroyit for every security need. Contact your Destroyit dealer today.

SHRED IT AT THE SOURCE
destroyit

MBM
CORPORATION

800-826-0161, Ext. 201
www.mbmcorp.com
sales@mbmcorp.com



- *Economic:* Local, regional, national, and international economies can affect an organization, depending on its size, scope, and market. Rates of unemployment and inflation can help or hinder growth if the organization is caught off-guard. Economic information can help the organization prepare for changes in these and other related issues (e.g., exchange rates and gross national product of potential trading nations).
- *Social:* Market changes are sometimes driven by changes in society. Demographic shifts in the population may cause an increase or decrease in demand for a given product or service. Demographic information should be monitored for changes in variables such as size and distribution of population, age, education, and income. Additional, qualitative indicators (e.g., consumer attitudes) are also important and should be monitored.
- *Political:* Local, national, and international politics can influence an organization in ways that may be direct or indirect. Certainly, the acts of terror on September 11, 2001, directly affected many national and international business practices. Tariffs can concern organizations by either restricting trade flows or by encouraging them, depending on how they are set. It is useful for an organization to have a clear understanding of the political climate in which it operates so that it can be prepared for sudden changes that result from elections or changes in existing policies or laws.

How Does Environmental Scanning Work?

Executives and other decision-makers within an organization must not spend their entire time monitoring the environment. The environmental scanning function can be set up as a distinct unit, scru-

External Environments Impacting the Modern Organization



tinizing developments based upon a set of criteria developed in conjunction with the primary decision-makers in the organization, prioritizing those trends and events with the potential for the most critical impact.

Scanning the external environment identifies potential threats to and opportunities for an organization; an internal assessment of an organization identifies its strengths and weaknesses. Informal sources and the information they produce, emerging issues, as well as the strengths and weaknesses of an existing system, can be identified. A more formal scanning system can be used to correct the weaknesses.

A formal environmental scanning process has five basic steps that are integrally linked and may overlap with others:

- 1) *Identify the environmental scanning needs of the organization.* The overall purpose of the scanning, participants in the process, and allocation of time and resources must be determined prior to beginning the scanning process. This means that senior management has to recognize the need for scanning in order for it to be successful. It is useful to have participants

meet to initially discuss potential changes that may influence the organization based upon their tacit knowledge and experiences.

- 2) *Gather the information.* The organization's needs must then be translated into specific elements of information that will be required. A list of questions and selected sources should be prepared in advance in order to make scanning activities more targeted and effective.
- 3) *Analyze the information.* Once information has been collected, it should be analyzed for issues and trends that may influence the organization. This step may need to be repeated if there are gaps in the information or if new questions arise from the compiled information.
- 4) *Communicate the results.* Information that has been analyzed and translated into potential effects on the organization can next be reported to the appropriate decision-makers within the firm. Because managers prefer to minimize the amount of time necessary to study information and make decisions, reports should be presented in concise format and

Sources of Information for Environmental Scanning

External Information Sources

- Personal contacts
- Journals/magazines
- Books
- Newspapers
- Professional conferences/meetings
- Radio, television, Internet
- Professional colleagues
- Customers
- Commercial databases

Internal Information Sources

- Personal contacts
- Internal reports
- Conference papers
- Internal memoranda
- Committees/meetings
- Sales staff
- Other managers
- Other employees
- Internal databases

customized to meet individual managers' preferences.

- 5) *Make informed decisions.* Once the environmental scanning activities have been presented, organizational leadership can take appropriate steps to position the organization in the manner that will be most responsive to the opportunities or threats that have been identified.

Information Sources for Environmental Scanning

There are a variety of sources commonly used in environmental-scanning practices. These include both external and internal information. External information sources can include a wide range of materials such as printed newspaper articles and experts in the field. External sources do not have to be published; in fact, most managers get much of their information from word-of-mouth through a personal network of contacts. Internal information includes organization-specific information that can be compared to the findings of external scanning in order to maximize organizational responsiveness. Examples of external and internal information sources are listed in the table above.

Generally, the planning phase of the environmental scan produces targeted issues likely to have an effect on the organization. Selecting which sources to use will depend on the potential point of impact on the organization. Early warnings will

come from informal sources such as direct interaction with a customer or from experts in the field. Later indicators may come from sources such as newswires or press releases. By the time information has been published, its effects will have likely already made their way into the organization and may be too late to counteract.

How Do Managers Use Information?

Organizational managers and executives are responsible for making quick decisions that may significantly change an organization. Environmental scanning offers anticipatory and forecasting information to assist managers in making these decisions while attempting to identify crises before they occur. Managers are also responsible for making many decisions and, therefore, do not have much time to devote to systematically searching for information. Instead, they need timely information that has been distilled down to the main points that are relevant to the organization.

Managers have certain preferences for how to receive information. Choo says that managers prefer information that is presented in concrete terms, clearly focused with attention given to detail, and in a way that allows them to scan and absorb the information quickly. Case studies and examples are particularly useful because managers often learn through comparison with experi-

ences of other organizations. This allows them to examine alternative solutions, then develop effective policies and decisions.

Managers obtain their information from a variety of sources, including print and online materials. Choo says they often rely most heavily, however, on a small group of individuals who serve as their network of resources. Managers prefer to receive information that is presented in person rather than through reading. This method allows managers to get only that information that they determine is necessary for making decisions, to ask questions, and to control the flow of information, which is not possible when depending on a book or report.

Which Organizations Should Consider Scanning?

Organizations considering the establishment or formalization of an environmental scanning function should ask themselves the following questions:

- Does the organization currently capture environmental information? In what ways? Is it formally structured?
- Is environmental scanning information considered to be important to strategic decision-making and planning? To operations?
- Is the organization flexible and open to new ideas?
- Does the organization's senior management support the idea of

environmental scanning at the highest levels?

- Are the organization's communications channels open to environmental scanning activities?
- Is the level of investment allocated to environmental scanning sufficient to benefit the organization?
- Where in the organization should this function be coordinated and located?

If the organization's senior management or executive staff is strongly in favor of an environmental scanning function, then it is more likely to receive adequate investment. In addition, managers who support the scanning function are more likely to integrate it into the full strategic planning function of the organization. This assimilation will increase the likelihood of success in both the environmental scanning function as well as the overall organization.

Barriers to Effective Scanning

There are several reasons why environmental scanning may not be effective in an organization. The sheer volume of information may be overwhelming, resulting in an information overload in which important pieces of information may be overlooked or missed. There are also many sources of information that scanners may not be aware of, and so they may miss potentially important information. Navigating the ocean of existing information is also difficult because of the sometime lack of organization and completeness of that which is presented. Even in the best of circumstances, information may no longer be timely by the time scanners are able to locate it. This is particularly true of rapidly changing markets that are influenced by technology or regulatory changes.

There are also problems with environmental scanning related to *interpretation* of the information that has been gathered. Determina-

tion of relevance, familiarity with the topic and information sources, language usage, time limitations, and accuracy of information all play a role in the analysis process. In addition, an overemphasis on scanning could have negative effects on an organization. This could be due to the focus on a defensive strategy to external forces rather than a continuation of process improvement and growth within the organization.

Environmental scanning offers many advantages for modern organizations. It contributes to an organization's transformation into a learning organization, one that continually seeks new information that may change its overall position in the marketplace. Environmental scanning also assists in the development of strategic plans and policies,

the assessment of new information, and the adjustment of internal operations to meet new challenges as they arise. It can identify an organization's unique strengths, find weaknesses in its competitors, and identify new markets, prospective customers, and emerging technologies.

Environmental scanning serves as an early warning system, identifying potential threats to the organization. By alerting the organization to possible changes in the environment, environmental scanning helps it modify its strategies to the external environment. The ultimate goal of environmental scanning is to help an organization learn about the external environment in order to increase its responsiveness and flexibility in decision-making processes. ■

Kendra S. Albright is Assistant Professor in the School of Information Sciences at the University of Tennessee, Knoxville. She may be contacted at albright@utk.edu.

References

- Abels, Eileen. "Hot Topics: Environmental Scanning." *Bulletin of the American Society for Information Science and Technology* 28 (February/March 2002).
- Aguilar, Francis J. *Scanning the Business Environment*. New York: MacMillan Company, 1967.
- Choo, Chun Wei. *Information Management for the Intelligent Organization: The Art of Scanning the Environment*. Medford, N.J.: Information Today Inc., 2001.
- "Environmental Scanning as Information Seeking and Organizational Learning." *Information Research* 7 (October 2001). Available at <http://informationr.net/ir/7-1/paper112.html> (accessed 5 March 2004).
- Snyder, Neil H. "Environmental Volatility, Scanning Intensity, and Organizational Performance." *Journal of Contemporary Business* 10 (1981).
- Stoffels, John D. *Strategic Issues Management: A Comprehensive Guide to Environmental Scanning*. Tarrytown, N.Y.: Elsevier Science Inc., 1994.

Read More About It

- Fahey, Liam, William R. King, and Vadake K. Narayanan. "Environmental Scanning and Forecasting in Strategic Planning: The State of the Art." *Long Range Planning* 14 (1981).
- Kumar, Kamalesh, Ram Subramanian, and Karen Strandholm. "Competitive Strategy, Environmental Scanning and Performance: A Context Specific Analysis of their Relationship." *International Journal of Commerce & Management* 11 (2001).
- Thomas, Philip. S. "Environmental Scanning: The State of the Art." *Long Range Planning* 13 (February 1980).

Copyright of Information Management Journal is the property of Association of Records Managers & Administrators and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.