DOCUMENT RESUME

ED 386 105 HE 028 513

AUTHOR	Morrison, James L.
TITLE	Institutional Vulnerability/Opportunity Audit. Preconference Seminar Proceedings of the AIR Forum (Boston, Massachusetts, May 28-31, 1995).
PUB DATE	May 95
NOTE	14p.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Computer Networks; *Educational Attitudes; Higher Education; *Institutional Evaluation; *Institutional Research; Institutional Role; *Institutional Survival; *National Organizations; Seminars; Social Change; Socioeconomic Influences; Technological Advancement
IDENTIFIERS	*Association for Institutional Research

ABSTRACT

These proceedings report on a seminar held to determine the needs and wants served by the Association for Institutional Research (AIR) in regard to products and services provided by AIR to institutions and individuals. A vulnerability/opportunity audit was conducted to identify the strengths and weaknesses of the organization. Participants listed the strengths of AIR in regard to support to professionals, institutional research (IR) as a profession, and higher education. They also identified the weaknesses of AIR as an institution, as well as social, technological, economic, and political factors contributing to the declining importance of AIR. Participants also analyzed the effects of two potentially critical events on the organization: (1) increasing use of the Internet as a means of networking, holding virtual conferences, and exchanging information; and (2) the development of vertical market computer software for basic IR functions. (MDM)

Institutional Vulnerability/Opportunity Audit

Proceedings

Preconference Seminar
1995 AIR Forum
May 28-31
Boston

James L. Morrison
CB 3500 Peabody Hall
University of North Carolina
Chapel Hill, NC 27599
919 966-1354
Fax 919 962-1533
Internet Morrison@unc.edu

Preconference Seminar

Institutional Vulnerability Audit

Proceedings

Abstract

This is a proceedings of the 1995 AIR Preconference Seminar on the Institutional Vulnerability Audit. It consists of a report generated via several exercises described in the seminar handbook—AIR strengths, potential vulnerabilities, an analysis of the probability and impact of two vulnerabilities expressed in the form of event statements, the implications of that analysis for AIR, and recommendations we make to AIR based upon these implications.

Time did not allow us to view the strengths and vulnerabilities of AIR for more than the "needs and wants served" category. To conduct a complete audit of the organization, we would need an additional day. In conducting the analysis of potential events, we discovered it meaningful to view the positive as well as negative impact of events on the organization. Consequently, the title of the proceedings was changed to reflect this innovation.

Institutional Vulnerability/Opportunity Audit

Every organization can be hurt by outside forces or conditions over which it has little or no control. Planning as practiced in many colleges and universities today is often deficient because it does not identify a number of potentially threatening forces or conditions. In the past, many of these blind spots were overlooked because the dominant planning goals focused on growth. Threats were viewed primarily in terms of potentially damaging changes in the market. Another planning weakness is the tendency of people to assume continuation of past trends without examining the likelihood of discontinuities affecting the direction of those trends.

The organizational vulnerability/opportunity audit, originally developed as vulnerability analysis by SRI (1977), is a strategic planning tool that surfaces subtle or overlooked threats that may adversely or positively affect the organization's future. The focus is first on those threats that fall outside the normal sphere of organizational actions. However, often a threat can also be an opportunity, an opportunity that may not have surfaced without first focusing on threats and vulnerabilities. Hence the name, vulnerability/opportunity audit.

Vulnerability/opportunity audits are based upon five assumptions: (1) organizations exist because they serve some need; (2) organizations rely on support from the environment in which they are expected to operate; (3) organizations are vulnerable to the changing external environment; (4) some of these vulnerabilities can also be opportunities, and (5) organizations are undergirded by the following: needs and wants served by the organization, resources and assets the organization relies upon, stability of costs relative to competition, the organization's target customer base, technologies, special abilities, corporate identity symbols, barriers to competition, social values important to continuance of the organization, sanctions, perceived integrity of the organization, and the availability of complementary products or services.

The organizational vulnerability/opportunity audit reviews these supports from the perspective of current strengths. The supports are turned into questions: What needs and wants does the organization meet? What resources does it rely on?

What cost advantages are available? What special abilities does the organization have? What technologies underpin it?

The vulnerability/opportunity audit then examines the supports' vulnerability to removal, alteration, or substantial disruption. The key question embodied in this tool is: "What supportive elements, if suddenly taken away, might seriously impair or even destroy the organization?"

Needs and Wants Served by AIR: Strengths

The initial step in the process is to identify as many supports on which the organization depends as possible and then identify those forces, conditions, trends, and events that could damage these supports. A support can be tangible (e.g., a physical resource) or intangible (e.g., legislation, or social values that make a service/product desirable).

For the seminar, we focused only on one of the categories: needs and wants served by the Association for Institutional Research that underpin the demand for AIR's products and services.

We used the nominal group technique (NGT) to identify the needs and wants served by AIR. Participants were given 10 minutes to think how AIR served society and asked to write down their thoughts. We used a round robin approach where each participant in turn was asked to state how AIR served needs and wants in society. Only one nomination was given by each participant. Each statement was typed on a computer and projected via a LCD panel to a screen so that all could see the nominations. The next person was asked to submit their "best" candidate; during this time the only person talking was the person nominating a statement; all others were requested to think about the statement to see if it stimulated an idea that they had not had before.

This process went on until there were no more nominations. We then went back over teach nomination to clarify, discuss, edit, remove redundancies. The value of this process is first to have participants think before talking, and to get the thinking of all people in the groups.

The needs and wants that AIR serves as identified by the group were as follows:

For IR Professionals

1. Provides opportunities for global networking with fellow professionals and with leaders in intersecting fields
2. Provides a forum for testing IR member's ideas
3. Provides professional development opportunities for members
4. Provides encouragement and opportunity for AIR members to test ideas on informed and sympathetic audience
5. Promotes professional satisfaction
6. Contributes to wellness (e.g., families accompany members at meetings, provides opportunity for social interaction, rest, relaxation, break in routine, interacting with similarly isolated individuals)
7. Initiates new members into the profession
8. Offers professional validation for its members
9. Promotes awareness of career opportunities in IR

For IR as a profession

1. Contributes to developing appropriate IR theory, methodologies, standards, procedures, and practices
2. Validates IR as a profession
3. Recognizes and promotes important work in the field
4. Invigorates the profession
5. Identifies critical resources (e.g., people, studies, etc.)

For higher education

1. Provides information, analysis, and interpretation to external decision-makers (e.g., governmental leaders, accrediting agencies, stakeholders, opinion leaders), thereby improving the quality of their policies/decisions relating to higher education
2. Lobbies for the benefit of the membership and for higher education

3. Provides a professional counterpoint for policy declarations of political agencies
4. Coordinates efforts to address common threats
5. Promotes efficient and effective delivery of education
6. Catalyst for causing shifts in higher education paradigms by communicating new models of thought and patterns of behavior
7. Activities (e.g., publications, listserv, electronic AIR, conferences, seminars) inform educational leaders about the educational environment in which they exist and may exist in the future
8. Promotes cooperation/competition with such organizations as CAUSE, EDUCOM, and SCUP
9. Provides a channel for external organizations (e.g., NCES) to communicate matters affecting the profession or higher education
10. Provides network for development of studies and interinstitutional collaboration
11. Provides for peer interinstitutional collaboration and benchmarking

Needs and Wants Served by AIR: Vulnerabilities

The next exercise was to identify the vulnerabilities that AIR may have in serving the needs and wants of IR members, the profession, higher education, and the larger society. Relevant vulnerability questions asked were:

a. Could a need or want be served some other way by some other organization?
b. Could the need for a product or service disappear? If so, under what circumstances?

We again used the nominal group technique to identify the following vulnerabilities that AIR may have in this area. In order to prepare these vulnerabilities for further analysis, we edited the vulnerability statements into event statements and categorized them into vulnerabilities that would affect AIR directly as an organization and potential events in the social, technological, economic, and political macroenvironment that would have an effect on AIR *if they should occur*. These event statements are as follows:

AIR as an organization

1. Other national organizations (e.g., SCUP, CAUSE, EDUCOM, AACRAO, AAHE, and other organizations at One DuPont Circle) subsume functions of AIR
2. Regional or state IR organizations subsume functions of AIR
3. Other regional or state organizations subsume functions of AIR
4. AIR survey reveals that IR functions diffused throughout 50% of all colleges and universities
5. 30% membership decline in AIR
6. Graduate programs in higher education train 80% of new IR professionals
7. 50% of AIR Forum evaluation indicates dissatisfaction with quality of presentations
8. 50% of IR offices required to do policy analysis
9. AIR leadership group becomes ossified in its thinking

Social

1. 25% of high school graduates with SATs over 1200 enters labor market via corporate training
2. 50% of FTE based on Internet, distance education sources
3. Development of international education standards

Technological

1. 80% of IR professionals use the Internet as their primary means of networking, virtual conferences, information exchange, etc.
2. Artificial intelligence replaces basic IR function
3. Vertical market software for basic IR functions developed
4. Software program developed that combines current data requirements by SPRE, IPEDS, Student Right to Know, NCES, Title Four Recertification Data, and accreditation coordinated by Federal government

Economic

1. 80% of IR offices have travel budgets eliminated for national conferences

2. Federal funding for education reduced by 20%
3. 60% of states reduce funding for education by 20% or more
4. Major recession
5. 70% of IR functions outsourced
6. 65% of colleges and universities take a 5% or more budget cut
7. US and Japan have trade war
8. World Trade Organization stops US and Japan trade war

Political

1. "Contract with America" is operationalize
2. Recission bill enacted
3. Federal government eliminates IPEDS
4. US Department of Education eliminated
5. SPRE is eliminated
5. Federal financial aid replaced by voucher system
7. 50% of public institutions derive 50% of income from non-government sources
8. SPRE, IPEDS, Student Right to Know, NCES, Title Four Recertification Data, and accreditation coordinated by Federal government
9. Mexican revolution
10. Anglophon Canadian providences join USA

Probability/Impact Analysis of Two Events on AIR

The third exercise was to prioritize the vulnerability event statements. The five most potentially critical events should they occur were:

1. 80% of IR offices have travel budgets eliminated for national conferences
2. Vertical market software for basic IR functions developed (i.e., software designed for a specific function or application in higher education)
3. Other national organizations (e.g., SCUP, CAUSE, EDUCOM, AACRAO, AAHE, and other organizations at One DuPont Circle) subsume functions of AIR
4. 30% membership decline in AIR

5. SPRE, IPEDS, Student Right to Know, NCES, Title Four Recertification Data, and accreditation coordinated by Federal government

At this point we divided into two groups, each group charged with conducting a probability impact analysis of a critical vulnerability event. We chose the top two events and conducted a Delphi. Each member of the group independently estimated the probability that the event would occur within five years and the degree of negative and the degree of positive impact that the event would have on AIR. The group then discussed the reasoning behind the disparity in estimates. A recorder made notes as to the factors affecting probability of occurrence, degree of positive impact and degree of negative impact. Group discussion then focused on the implications of negative and positive impact, concluding with a series of recommendations for the AIR Board of Directors to consider when planning for the future. The analyses of the top two events follow.

Event: 80% of IR professionals use the Internet as their primary means of networking, virtual conferences, information exchange, etc.

Median probability event will occur within five years: 60%

Forces affecting probability:

1. Availability of networking at individual institutions increasing
2. Internet training increasingly available
3. Increasing willingness of IR professionals to use Internet
4. Motivation and reinforcers to use Internet come from
   a. state of the art
   b. speed of information
   c user friendly interface

Degree of negative impact: very light

Implications of negative impact

1. Forum attendance may decrease
2. Interest in reading paper versions of manuscripts may decrease
3. Ownership of ideas becomes more vulnerable

4. Fragmentation of ideas over Internet (as opposed to complete speeches at the Forum)
5. People respond immediately; less thoughtful exchanges

Degree of positive impact: very high

Implications of positive impact:

1. Timely sharing of information
2. Increased productivity
3. Increased possibilities for institutional collaboration
4. Opportunity for AIR to sponsor Internet training
5. Pre-forum information/papers can be posted electronically; saves paper, and changes Forum sessions from passive, listening to presentations, to active discussions led by presenter.
6. Increase Forum attendance (People who interact electronically will seek opportunities for face-to-face meetings)

What should AIR do?

1. Maximize use of Internet in conducing AIR business, initiating professional development opportunities, and fulfilling AIR mission.
2. Create a WEB site; put AIR publications, including Forum papers, on Web site
3. Explore how other professional associations are meeting the challenge/opportunities of the Internet
4. Survey membership for their Internet capabilities and needs in the areas of technology, institutional and personal
5. Monitor policies affecting Internet access and use

Event: Vertical market software for basic IR functions developed (i.e., software designed for a specific function or application in higher education)

Median probability event will occur within 5 years: 30

Forces affecting probability

1. Current changes in information technology (e.g., more powerful software and hardware engines) increase probability
2. The more complex it is (i.e., the greater the scope of functions incorporated), the less the probability
3. The diversity of types and sizes of colleges and universities increases the scope and decreases the probability
4. Possibility that the Federal government will require a standard methodology of reporting required data increases the probability
6. The greater the cost of product, the less the probability of broad adaptation
7. If decision-makers see a substantial increase of functionality over tools currently in use, the likelihood that the software will be developed is increased

Degree of negative impact: Slightly above light impact

Implications of negative impact

1. Perception that with this supertool, colleges will need fewer IR personnel
2. Potential conflict with other professional groups within institutions over control and implementation of the software (e.g., ?)

Degree of positive impact: Light to moderate

Implications of positive impact

1. Need to train IR professionals how to use the new software
2. Need to coordinate use and output between institutions and the agencies to whom they report
3. New opportunities for doing higher level work (can do truly comparable surveys presently limited by the lack of common methodologies)
4. New opportunities for cooperation with other institutions to conduct benchmarking
6. IR Offices can standardize reporting to stakeholders and the media by reporting criteria and methodology of report (thereby enabling, for example, IR offices across the country to provide comparable data to organizations such as *US News and World Report*).

What should AIR do?

1. Facilitate, promote, encourage more sophisticated software for IR reporting
2. Test and validate such software (i.e., AIR should influence the practicality, accuracy, validity and appropriateness), and assure that the software should not be driven by political forces.
3. Provide training and the use of the software
4. Develop information-brokering as a spin-off profession within IR
5. Identify new IR opportunities for this new tool.
6. AIR should hold
   a. a contest for developing the software
   b. facilitate collaboration of IR professionals to develop the software

Discussion

We were able to cover only one of the underpinning categories, needs and wants served, and were also limited to an analysis of only two events that surfaced in this category. Even so, we were able to experience how to conduct the audit and to derive several recommendations that may be useful to the AIR board when planning for the future.

The organizational vulnerability/opportunity audit is not without limitations. For example, the process does not address those problems due to the internal environment or those problems due to competitor's actions. Too, team members may not have sufficient knowledge or vision to evaluate threats.

But there are a number of benefits to applying an organizational vulnerability/opportunity audit. First, the process increases the expertise and judgment of organizational leaders by making them aware of conflicts in planning assumptions--both implicit and explicit. This awareness, in turn, helps organizational leaders anticipate change and surface emerging issues. Moreover, by identifying overlooked threats (environmental, not those posed by competitors), leaders have time to monitor threatening situations, to review options, and to prepare contingency plans, thereby avoiding unpleasant surprises.

The auditing process itself focuses attention on factors and issues most relevant to the institution. Some organizations try to monitor everything in the environment,

which wastes both time and resources. Other organizations monitor some environmental areas, not necessarily the right ones, wasting money and exposing the organization to unnecessary risks. The organizational vulnerability/opportunity audit exercise focuses on the most important areas, the ones that may cause the biggest problems for the institution.

Bibliography

Morrison, J. L. & Keller, G. (1992-93, Winter). Newest tool: The institutional vulnerability audit. *Planning for Higher Education, 21*, pp. 27-34.

SRI. (1977). Vulnerability analysis: What it is and what it does. In SRI Business Intelligence Program Report No. 593. SRI International.