WIRED IN BEANTOWN: A STUDY OF ON-LINE ADVOCACY BY NON-PROFITS IN THE GREATER BOSTON AREA

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Thomas P. "Tip" O'Neill, famous Boston politician and former Speaker of the United States House of Representatives once observed that "All politics is local" (O'Neill, 1987). It seems that this message is often lost on advocates at the national level. While the trend toward devolution has refocused some attention on the importance of state and local organizations, the prevailing perception is that anything worth knowing about happens within the (Washington, DC) beltway. In fact, local advocacy has always been critical to the nonprofit sector and it promises to be even more so in the future with the national trend toward devolution and decentralization (Berry & Arons, 2000).

The use of electronic advocacy is a new wrinkle in the nonprofit advocacy landscape. While this trend has been documented nationally (McNutt, 2000a; 2000b; McNutt & Boland, 1999; Turner, 1998), there are few studies of local efforts. The present study will attempt to partly fill this gap by addressing four critical questions in the preliminary results of a study of Boston area organizations: What types of electronic or on-line advocacy techniques are used by local non-profits in their policy change efforts? What are the perceived barriers to the use of electronic or on-line advocacy by local non-profits? What factors explain variation among local non-profits in the use of electronic or on-line advocacy techniques? Are there variations among organizational fields in terms of the use of electronic advocacy techniques?

Review of the Literature

The use of information and communications technology in advocacy is a new and growing phenomenon (McNutt, 2000a; Turner, 1998; Bennett & Fielding, 1999; Rainey, 1999). These techniques are characterized by the use of technology to enhance advocacy efforts and their application allows organizations to reach larger populations at lower costs and address diffuse decision-making environments.

Much of the attention in electronic advocacy is concentrated at the national level as many of the larger national organizations have developed programs (McNutt, 2000b). Yet, organizations at all levels have as much to gain from these new technologies as national or state level organizations. While studies have documented the use of these techniques at the state and national level (McNutt & Boland, 1999; 2000), there have been few studies at the local level (Wittig, & Schmitz, 1996). It is possible that local organizations may use different techniques or organize in a different manner, but this is just conjecture unless research exists to validate it.

There is also indication that the organizational field may have an impact on how it implements electronic advocacy. The environmental field has been singled out as having a particularly good record on the incorporation of technology (McNutt, 2000b). The social welfare field, on the other hand, is usually considered somewhat lagging in terms of technology.

Theoretical Framework: The utilization of electronic advocacy techniques by local organizations is primarily one of the adoption of an innovation. A useful theoretical approach is provided by Rogers (1995) diffusion of innovation theory (Strang, & Soule, 1998; Brancheau & Wetherbe, 1990; Norris, 1999). This formulation argues that innovations are communicated to a series of target populations through networks and

opinion leaders. The rate of adoption is influenced by organizational attributes and innovation attributes and by the avenues for communication. On the innovation side, the attributes are relative advantage, compatibility, complexity, trialability and observability. In this context, McNutt & Boland (1999; 2000) argued that less sophisticated technologies (such as e-mail, fax and telephone-based systems and simple websites) would be more likely to be adopted than more technologically sophisticated techniques. Any advocacy technique would have greater relative advantage in an organization that devoted more effort to policy change. Organizational aspects that would be important for adoption are size, structure, leader characteristics, centralization, formalization, interconnectedness, slack resources and system openness. Rogers argues that these factors are mostly explained by size. Access to the critical communications networks comes from knowledge of the work of other groups and access to a consultant.

The variation between organizational fields can be explained by institutional theory (Powell & DiMaggio, 1991) which argues that organizations adopt technology in such a way that it is consistent with existing organizational patterns. Organizational fields tend to acquire sameness through a process called insomorphicism. This would argue for similarities in approach between organizations in the same field.

These theoretical arguments allow us to advance several hypotheses to guide the research:

H_1: Boston Area Advocacy Organizations will be more likely to have implemented those techniques that present the following characteristics: relative advantage, compatibility, complexity, trialability and observability

H_2: Boston Area Advocacy Organizations will be more likely to plan to implement those techniques that present the following characteristics: relative advantage, compatibility, complexity, trialability and observability

H_3: Boston Area Advocacy Organizations that have larger staffs, use a consultant, have observed electronic advocacy in other groups, perceive electronic advocacy as effective, have fewer organizational barriers and devote more effort to policy change will be more likely to use a wider range of electronic advocacy techniques.

H_4: Boston Area Advocacy Organizations that have larger staffs, use a consultant, have observed electronic advocacy in other groups, perceive electronic advocacy as effective, have fewer organizational barriers and devote more effort to policy change will be more likely to plan a wider range of electronic advocacy techniques

H_5 Boston Area Advocacy Organizations that deal primarily with environmental issues will use more technology and more sophisticated technology than groups working on other issues.

Methodology

This is a cross sectional study of organizations engaged in creating or changing public policy. The principle variables examined were methods used, barriers, perceived effectiveness, perceived use by other groups, policy effort, use of a consultant, organizational field/sector and size.

All subjects were 501(c) 3 organizations in the Boston area listed in the Guidestar database (www.guidestar.org). The unit of analysis is the organization. Subjects were selected using searches of the Guidestar database for 25 miles around downtown Boston. This was supplemented by searches of the Massachusetts lobbying registration database.

Organizations that did not fit the sampling criteria were deleted. The final sample was 86 organizations.

The instrument was adapted from one used in an earlier study (McNutt & Boland, 2000). A new pre-test was conducted and modifications were made. All organizations on the list were sent a questionnaire, accompanied by a cover letter and self-addressed stamped envelope. Reminder letters were sent and telephone calls were made to nonrespondents. All data were coded and cleaned.

Results

The data collection phase was conducted during the fall and early winter of 2000. Five questionnaires were returned by the post office as undeliverable. A total of 39 usable questionnaires were returned. This represents a return rate of 48% from the 81 viable addresses. The latter includes a number of organizations that may no longer be in business. This is a modest, but reasonably good result for this type of organization.

Organizational Characteristics: There was a great deal of variation in organizational size. Some organizations reported having no employees while others reported over 700. The mean was 65.333 with a large standard deviation of 145.5218. The median (13) is probably a more reliable indicator of the average participant organization. Many of the organizations are very small. Fewer than five total employees were reported by 30.8% of the respondents. Only seven organizations reported over 100 employees. Table One presents the data on staff size. Some organizations use volunteers and some are membership organizations. A number of these organizations are also national and even international policy advocates (Table 1).

Time Spent on Policy Work: Respondents were asked how much staff time was spent on advocacy work. The largest group (41.7%) spent 25% or less of their staff time on policy issues, while 22.2% of respondents spent between 26 and 50%, 16.7% spent 51-75% and 19.4% spent 76-100%.

Electronic Advocacy Techniques Used: Respondents were asked to identify which techniques they currently use and which they plan to use. The average organization reported using 8.0256 techniques with a standard deviation of 3.0564. The median was 8.0. Respondents reported that their organizations planned the implementation of a mean of 1.5641 techniques with a standard deviation of 1.8750 and a median of 1.0. Tables two through five present the responses for the items on electronic advocacy techniques. Most agencies reported using a range of techniques, but few went beyond telephone/fax, e-mail and websites. A small number of agencies were using cutting edge technologies, such as geographic information systems and Intranets. Tables 2-5 resent the information on individual techniques.

Perceived Use by Other Groups: Respondents were asked to evaluate the extent of use by other groups on a seven-point scale. The resulting mean was 4.5217 with a standard deviation of 1.4731.

Perceived Effectiveness: Respondents were asked to evaluate how effective they felt electronic advocacy was on a seven-point scale. The resulting mean was 4.5600 with a standard deviation of 1.8502. This indicates moderate support for the effectiveness of electronic advocacy.

Most Often Used and Most Effective Techniques: E-mail was the most cited effective technique. There was little difference between the other techniques and they were infrequently mentioned. There was a good deal of missing data in this variable.

Differences between sectors: Organizations were classified as environmental organizations, civil right and liberties organizations, social welfare organizations, health care organization and other organizations based on their descriptions in the Guidestar database. ANOVA was used to evaluate the differences between groups in terms of current and planned use of technology. There were a number of small differences between the sectors in terms of current use and planned use. Neither F-Test was significant (Current Use F=1.713 p= .170, Planned Use F=.382 p=.820). A sub-index of leading edge technologies was developed and sectors were compared. Again there were no statistically significant differences (F=1.835, p=.145) between the categories (See Table 6) The small number of cases in each category argues for a heuristic interpretation of these findings.

Barriers: Expertise was the principle reported barrier (61.5%), followed by equipment (53.8%) and expense (51.3%). The other barriers were reported far less frequently. Table 7contains the results for this area.

Consultants and Internal Expertise: Respondents were asked if they either used a consultant or hired an internal technology person. A large group (74.4%) had an internal person to coordinate technology. They also reported that 64.5% of the organizations used a consultant.

Regression Analysis: Regression analysis was used to evaluate the relationship between current and planned use with the organizational predictors. The zero-order correlations are found in Table 8 All of the relationships between variables are extremely modest.

Two OLS Regression Models were fitted. As Table 9 shows, the regression for current use yielded an R (.710) and R^2 (.504) that are of reasonable size, but the F-Test is not significant (F=1.690, P=.221), as are the standardized regression coefficients. The regression for planned use tells a similar story with reasonable R (.785) and R^2 (.615), but the F-Test is not significant (F=.2.663, P=.082) and neither are the standardized regression coefficients. Given the variation in organizational size and the amount of missing data on some critical variables, this result is not altogether unexpected.

Discussion

The organizations in this study represent a wide variety of organizational sizes and missions. They also vary widely in the degree of technological sophistication. They also vary widely in the amount of their staff time on policy-related matters. The results to provide some evidence for drawing conclusions on our central interests. The five hypotheses are examined below:

H_1: Boston Area Advocacy Organizations will be more likely to have implemented those techniques that present the following characteristics: relative advantage, compatibility, complexity, trialability and observability

H_2: Boston Area Advocacy Organizations will be more likely to plan to implement those techniques that present the following characteristics: relative advantage, compatibility, complexity, trialability and observability

These two hypotheses appear to be supported by the data. Most organizations use what are on the low technological end of electronic advocacy: e-mail and related techniques, telephone and fax based techniques and simple webpages. Fewer organizations are using the more highly technological methods. This is consistent with Rogers (1995) diffusion of innovation theory.

H_3: Boston Area Advocacy Organizations that have larger staffs, use a consultant, have observed electronic advocacy in other groups, perceive electronic advocacy as effective, have fewer organizational barriers and devote more effort to policy change will be more likely to use a wider range of electronic advocacy techniques.

H_4: Boston Area Advocacy Organizations that have larger staffs, use a consultant, have observed electronic advocacy in other groups, perceive electronic advocacy as effective, have fewer organizational barriers and devote more effort to policy change will be more likely to plan a wider range of electronic advocacy techniques

These two hypotheses were not supported by either the correlational or the multiple regression analysis. The weak set of relationships does not allow one to conclude that these factors adequately predict either current or planned use. The small sample size may account for this finding.

H_5 Boston Area Advocacy Organizations that deal primarily with environmental issues will use more technology and more sophisticated technology than groups working on other issues.

This hypothesis is not supported by the results. There are small differences between the groups in terms of current or planned usage and in use of high technology. They do not, however appear to be substantive differences and none were statistically significant. This

is consistent with McNutt's (2000b) findings. On balance, the small number of cases makes it difficult to have confidence in these results.

These preliminary results support part of Rogers (1995) diffusion of innovation approach (innovation attributes) but not others. It does not support institutional theory.

This research must be considered in light of its limitations. As a survey, it suffers from the usual limitations of social desirability effect, misunderstood questions, lack of context and so forth. The response rate is modest, which reduces confidence in the results. The sampling design could allow some unknown sources of bias. Only 501(c) 3 organizations in the Guidestar database are used, which seriously limits the comprehensiveness of the study.

This study suggests some future research needs. A study of other kinds of non-profit advocacy groups is clearly needed. This would include trade associations and professional groups. Also important are studies that examine the dynamic interplay between organizations in an advocacy arena. This would involve assessing how the techniques are actually used in advocacy practice.

The Boston area is the birthplace of the Internet and home to many of the United State's major technology players. This study suggests that electronic advocacy is alive and well in the Boston area.

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Tables & Figures Boston Area Advocacy Study

Table 1: Staff Reported Classified by Status

Status	Minimum	Maximum	Mean	Median	Standard Deviation
FT Professional	0	750	45.9487	9.000	123.4721
PT Professional	0	300	11.9744	1.000	48.4608
FT Support	0	75	5.2564	.000	14.8070
PT Support	0	25	2.1538	.000	4.8043

Table 2: Use of E-Mail and Telephone Based Techniques Reported

Technique	No Plans N %	Have N %	Planned N %
E-Mail for Internal Coordination	7 17.9%	31 79.5%	1 2.6%
E-Mail for External Coordination	9 23.1%	28 71.8%	2 5.1%
Discussion Lists	21 53.8%	15 38.5%	3 7.7%
E-Mail to Decision-Makers	16 41%	18 46.2%	5 12.8%
Newsgroups	34 87.2%	3 7.7%	2 5.1%
Internet Relay Chat	35 89.7%	1 2.6%	3 7.7%
Distribution List	12 30.8%	24 61.5%	3 7.7%

Table 3: Organizations Reporting Use of Simple Web-based Technologies

Technique	No Plans N %	Have N %	Planned N %
WebPages	0	34 87.2%	5 12.8%
Legislative Information on the Web page	19 48.7%	14 35.9%	6 15.4%
Case Studies on the Webpage	27 69.2%	9 23.1%	3 7.7%
Statistics on the Webpage	21 53.8%	15 38.5%	3 7.7%

Links to Policy Sites on Webpage	14 35.9%	18 46.2%	7 17.9%
Advocacy Information	20 51.3%	14 35.9%	5 12.8%

Table 4: Organizations Reporting Use of Advanced Web-based Technologies

Technique	No Plans N %	Have N %	Planned N %
On-Line Fundraising	14 35.9%	19 48.7%	6 15.4%
Secure Site	18 46.2%	15 38.5%	6 15.4%
Shopping Related	30 76.9%	7 17.9%	2 5.1%
On-Line Survey	32 82.1%	3 7.7%	4 10.3%
Volunteer Recruitment	20 51.3%	11 28.2%	8 20.5.%
Banner Advertisments	37 94.9%	2 5.1%	0
Streaming Video	37 94.9%	0	2 5.1%
Intranet	28 71.8%	7 17.9%	4 10.3%

Table 5: Use of Miscellaneous Techniques Reported organizations

Technique	No Plans N %	Have N %	Planned N %
Geographic Information System	30 76.9%	2 5.1%	7 17.9%
Teleconferencing	36 92.3%	1 2.6%	2 5.1%
Standard Fax	4 10.3%	35 89.7%	0
Broadcast Fax	22 56.4%	15 38.5%	2 5.1%
Fax on Demand	36 92.3%	2 5.1%	1 2.6%
Policy Web Sites for Policy Research	24 61.5%	15 38.5%	0

Policy Discussion Lists for Policy Research	28 71.8%	10 25.6%	1 2.6%
Conference Call	9 23.1%	29 74.4%	1 2.6%

Table 6: Means for Dependent Variables by Sector

Area		Current	High Tech	Planned
Environment and Nature	Mean N Std. Deviation	8.2500 4 1.2583	1.2500 4 1.2583	2.5000 4 2.0817
Civil Rights & Liberties	Mean N Std. Deviation	7.1111 9 2.4721	1.3333 9 1.0000	1.5556 9 1.3333
Health Care	Mean N Std. Deviation	9.7143 7 4.1519	2.8571 7 1.6762	1.0000 7 1.0000
Other	Mean N Std. Deviation	11.5000 2 .7071	2.8571 7 1.6762	1.5000 2 2.1213
Social Welfare	Mean N Std. Deviation	7.3529 17 2.9356	1.5294 17 1.5459	1.5882 17 2.3733
Total	Mean N Std. Deviation	8.0256 8.0256 3.0564	1.7692 39 1.4949	1.5641 39 1.8750

Table 7: Reported Barriers to Implementation

Barrier	N	%
Expertise	24	61.5
Expense	20	51.3

Equipment	21	53.8
Access (Universal)	6	15.4
Awareness	6	15.4
External Resistance	4	10.3
Internal Resistance	0	0
Management Approval	4	10.3
Staff Resistance	5	12.8

Table 8: Zero-Order Correlations

	Policy Effort	Consult	Effect	Current Use	Other Group Use	Staff	Barriers	Planned Use
Policy Effort	1.00							
Consult	-.108	1.00						
Effect	.084	.170	1.00					
Current Use	.018	-.210	.282	1.00				
Other Group Use	-.135	-.260	.113	.381	1.00			
Staff	-.075	-.022	.382		-.230	1.00		
Barriers	.298	.150	-.116	-.037	.244	-.075	1.00	
Planned Use	.236	.296	.183	.126	-.227	.008	.236	1.00

Table 8: Regression Coefficients

Coefficient	Current Use	Planned Use
R	.710	.785
R^2	.504	.615
Adjusted R^2	.206	.384
F	1.690 P=.221	.2.663 P=.082

	Current Use		Planned Use	
	B	Sig.	B	Sig.

(Constant)		.194		.260
BARRIERS	.446	.293	.400	.284
CONSULT	-.213	.468	.521	.062
EFFECT	.567	.091	.229	.410
OTHGRP	.211	.513	-.424	.154
STAFF	.074	.792	-.220	.386
Time Spent on Policy	-.467	.209	-.149	.637