Nonprofit websites: Adoption and type in census district 8

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ABSTRACT

The authors review the issues confronting nonprofit organizations and describe the types of websites to consider by size of the organization and focus of the organization. An analysis is done on an initial population of 557 organizations in District 8 of the U.S. census data .The authors examine the adoption of websites and if nonprofits are using the right type of website. The managerial implications address possible ways to optimize the use of resources for small and larger organizations.

Keywords: websites, website types, nonprofit, website adoption

INTRODUCTION

Research shows that simply transposing traditional marketing strategies onto the Internet is not effective (Moran and Hunt 2006). Most marketing researchers agree that the web is at its best when it provides true interactive communication between brand and consumer (Chadwick 2005a). In fact, the Net is an effective direct marketing vehicle because it is an efficient channel for managing two-way customer relationships (Chadwick 2005a). Unfortunately, the time, money, and expertise necessary to capitalize on this seemingly perfect fit with many nonprofits by developing an effective website are not available (Hooper and Stobart 2003). In fact, most of the smaller nonprofits lack an internal dedicated marketing function (Nucifora 2005). As a result, they often spend a significant amount of a limited budget on the wrong type of website for their particular needs. As such, the focus of this research is fourfold. First, explain the different types of website design that these organizations should consider. Second, explain which type to choose based upon the organization's mission, reach, and vision. Third, analyze how these organizations are doing in the adoption of websites overall. Fourth, analyze if those organizations that have adopted websites are using the right type of website. The authors begin with a literature review before addressing these four points.

LITERATURE REVIEW

From a budgetary perspective, it is clear that nonprofits are fighting an uphill battle. Sources of funds are restricted to the government, foundations, religious organizations, individuals, and like-minded other nonprofits (Ebaugh, Chafetz, and Pipes 2005). Many manage with a small staff and a tight budget (Chiagouris 2005). Nonprofits everywhere are dealing with declining donations and tightening budgets (Naddaf 2004). Some argue that this decline is being driven by the fact that people are supporting fewer nonprofits thus requiring nonprofits to do more with less (Bhagat 2004). This has only been magnified by pressures created by the current economic crisis. The combination of these pressures and attitudes points to the necessity of nonprofits finding ways to lower marketing costs through increased use of the internet. Unfortunately, many nonprofits tend to focus more on the aesthetics of the website than its effectiveness. The end result, regardless of the driver, is that less money translates to slower adoption of new technologies (Andruss, 2001). This makes it harder for nonprofits to be innovative (Liu and Weinberg, 2004).

Historically, nonprofit managers tend not to invest too much in technology due to their budget constraints. When they do invest, they invest in smaller incremental amounts (Corder, 2001) compared with the large scale undertakings that are more common in the for-profit world (Sheh, 1993). Therefore, it is not surprising that only 15% of nonprofits had a website in 1999. However, by 2005, amidst tightening budgets, all those surveyed recognized it is a necessity (Bhagat, 2005). Additional obstacles for the nonprofit are the time, money, and expertise required to develop a website, most of which are not readily available to them. (Hooper and Stobart (2003). This, accompanied by the fact that "even the largest website may be overlooked if search engine registration and marketing is not tuned to perfection" (Saxton and Game, 2001), does not bode well for nonprofits.

Further exacerbating this problem is the less-than-positive attitude that many nonprofits, especially those that are more religiously inclined, have towards marketing. Marketing is perceived as undesirable, too expensive, and questionable, at best (Kotler and Andreasen, 1991).

Most of the smaller nonprofits lack an internal dedicated marketing function (Nucifora, 2005) let alone a dedicated person to manage the website. The combination of these pressures and attitudes, coupled with the shortcomings of current SEM practices (McMahon and Griffy-Brown, 2009) points to the necessity of nonprofits having a better understanding of the types of websites available to them and how to choose the best type of website.

TYPES OF WEBSITES

Static Websites

A static website is the simplest form of a website, in which the site's content is delivered consistently to all end users. Static websites are used primarily for brochure sites and can include graphics, animations and simple JavaScript driven features. The main limitation of static websites is that they cannot provide true user interactivity, since they cannot either gather information from the user or serve content dependent on user actions. Large static sites are also time consuming to develop and more difficult to update, since changes need to be implemented individually on each page of the site. However, if a business does not require a large website or advanced interactivity, a static site developed using XHTML and CSS will provide clean, compact coding and good search engine performance.

Dynamic Websites

Dynamic websites rely on server side scripting to provide advanced interactivity and usually use a database to deliver the content for individual pages. A dynamic approach is appropriate for developing large websites with content which is formulaic, for example, catalogues, photograph albums and complex series of data. A dynamic website will be required to allow users to sort and search records, or to restrict access to parts of the website using a log-in procedure. Generating website pages on the fly, using a database to store and deliver content, is an efficient way of managing a large site, with maintenance and updating generally much easier than for a comparable static site. The disadvantage of dynamic websites is that search engine optimisation techniques are more difficult to implement, particularly if the site's search engine optimisation needs are not taken into account at the development stage.

Content Managed Websites

A content managed website is a further refinement of the database driven dynamic site. The content management system provides a password protected interface through which users can add, edit and remove content from the site. A content management system is particularly useful in the case of large sites which have numerous contributors, some of whom may be working from remote locations.

Portal Site

A portal site aggregates information from various sources and presents the information on a single page. Portal sites position the user at the entrance to other sites on the internet. The site

typically has search engines, email services and chat rooms as additional features as indicated in Table 1 &2 (Appendix)

The two tables above illustrate two ways to operationalize reach and mission. By using these tables, an organization can determine the best fit website for the organization. This will help to ensure that the content and message is successfully structured and received by the desired visitors.

The success of the website primarily depends on its determination of the target audience for whom the website is targeting. Websites are developed keeping in mind the requirements of the visitors and the benefits derived thereafter by the particular website. Any website design, be it an informative, entertainment or business site must have the ability to successfully reach the right audience and retain them. The key is to select and develop the right website for the desired audience.

SAMPLE

A sample of nonprofits from the religiously affiliated segment of the nonprofit sector was chosen. Specifically, congregations from the churches of Christ in eight western states: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, and Wyoming were chosen. The rationale for this is threefold. First, these organizations are completely autonomous mitigating any effects due to a centralized initiative that may be the case in other affiliations or denominations. Second, these organizations have outreach that is focused on their local area of impact. Third, their strategic emphases are both internal and external.

METHODOLOGY

A database of all congregations in US Census District 8 (the states identified above), was built from available secondary data. Then protocols were developed for manually checking to confirm that each organization existed and to determine whether or not the organization had a website. For those organizations with a website, a further analysis of the website was conducted to classify the website as being of the static, dynamic, CMS, or portal variety. In addition to the variable "type of website", other variables of interest for the final analyses included "size of congregation" (a discrete variable having two levels: fewer than 100 members and greater than 100 members), "age of congregation" (in years), and a control variable "state".

It is expected that due to the resource constraints upon nonprofit organizations and, given the general observation that larger organizations tend to have larger budgets, it is hypothesized that among all organizations studied, the larger organizations will be better able to fund the development of a website and hence, will indeed have a website of some sort.

H1: There will be a significant association between size of organization and the existence of a website.

Beyond simply having a website presence, it is also of interest to determine whether or not congregations with websites are optimally deploying their resources by choosing the correct type of website. Therefore, the following hypothesis (H2A) is established to investigate the possibility of an overall relationship between "size of organization" and "type of website", among those organizations that do have websites. In the event a significant association is found,

for Hypothesis H2, a further investigation is conducted with Hypotheses 2B and 2C, below, this significant association within both small (2B) and large (2C) organizations. Specifically, it is tested to see if the smaller congregations are optimally deploying their resources by choosing a static website (2B) and if larger organizations are optimally deploying their resources by choosing a dynamic, CMS, or portal website (2C).

H2A: Among organizations having a website, there will be a significant association between "size of organization" and "type of website", controlling for state.

H2B: Smaller organizations will be more likely to use a static vs. a dynamic, CMS, or portal type of website.

H2C: Larger organizations will be more likely to use a dynamic, CMS, or portal type of website vs. a static website.

Since nonprofits are slow to make major changes and adopt technology, the organizations that were founded after the advent of the internet and its general use by the public, that is, they grew up with the internet, will be more likely to have a website than those founded before the advent and general use of the internet. This set of hypotheses requires the construction of a new variable, "internet age", which is defined as follows: churches founded before 1996 are coded BIA (before internet age) and those founded in 1996 or later are coded AIA (after internet age).

H3A: There will be a significant association between "internet age" and the existence of a website.

Since these organizations will tend to be more fluent in the language of the internet and its uses, they should have a higher incidence of choosing the right type of website than organizations formed before the advent and general use of the internet.

H3B: Smaller organizations founded after the advent and general use of the internet will have a higher incidence of static websites than smaller congregations founded before the advent and general use of the internet.

H3C: Larger organizations founded after the advent and general use of the internet will have a higher incidence of dynamic, CMS, or portal websites than larger congregations founded before the advent and general use of the internet.

RESULTS

The data gathering process resulted in a total sample of 557 congregations having valid data across the variables of interest. The number of organizations with a website presence was 189. For those organizations having a website, 139 had static websites and 50 had dynamic websites. Additionally, within this group of organizations (those with websites), 94 had fewer than 100 members and 95 had congregations with 100 or more members.

H1: There will be a significant association between "size of congregation" and the existence of a website.

Data:

<u>Membership</u>	Website Presence		
	No	Yes	
<100	333	94	
>100	35	95	

Analysis

To test this hypothesis, a simple logistic regression analysis was run with "size of the congregation" as the predicate variable and website presence (yes, or no) as the outcome variable. The resulting model had a beta coefficient that was significant at the .0001 level of significance and a corresponding odds ratio of 9.616. This would suggest a strong association between "size of congregation" and "website presence"; more specifically, the odds that smaller churches will not have a website presence are about 10 times that of the larger churches.

H2A: Among organizations having a website, there will be a significant association between "size of organization" and "type of website", controlling for state.

To test this hypothesis, a simple logistic regression analysis was run with "size of organization" and "state" as predicate variables and "type of website" (static, or dynamic) as the outcome variable. The resulting model had a beta coefficient for "size of organization" that was "marginally" significant at the .05 level of significance (p=.053), indicating that there appears to be a weak association between the size of an organization and the type of website. The "state" control variable was statistically insignificant and there was no interaction between "state" and "size of organization". However, this overall weak result could be a bit misleading. A closer look at the contingency table for "size of organization" and "type of website" (see below) shows that a large percentage (about 80%) of the smaller organizations have static websites while few small organizations have dynamic websites (only about 20%). Among large organizations, a sizeable percentage (about 67%) have a static website, with the remaining large organizations (about 33%) having a dynamic website. The following two hypotheses offer a more detailed analysis of the counts in the contingency table for organizations having websites as indicated in Table 3 (Appendix)

H2B: Smaller organizations will be more likely to use a static vs. a dynamic, CMS, or portal type of website.

To test this hypothesis, a simple estimate of the difference in proportions between static versus dynamic websites was computed for small churches, using a 95% confidence interval. The resulting 95% confidence interval estimate was (.486, .714), suggesting that the proportion of small churches having a static website is much larger (anywhere from 48% to 71% greater) than the proportion of small churches having a dynamic website.

H2C: Larger organizations will be more likely to use a dynamic, CMS, or portal type of website vs. a static website.

To test this hypothesis, a simple estimate of the difference in proportions between static versus dynamic websites for large organizations was constructed using a 95% confidence interval estimate. The resulting 95% confidence interval was estimated to be (.206, .473), suggesting that the proportion of large organizations with a static website could be anywhere between 20% to as much as 47% greater than the proportion of large organizations having dynamic websites.

MANAGERIAL IMPLICATIONS

The preponderance of static websites within the larger organizations in the sample suggests that growing the membership is not one of their goals. In informal interviews with a number of these organizations, one of the researchers found this to be far from the truth. As such, the larger organizations need to rethink their choice of website type. The process of determining which type of website is the best fit will aid in the optimal deployment of resources. As the level of sophistication of the organization increases, the data gathered from a website can be used to construct landing pages that target very precise consumer groups. By more efficiently and effectively segmenting the population, targeting the appropriate segments, and positioning the organization in their minds, nonprofits should expect to see an increase in membership which will help to alleviate the aforementioned budgetary pressures (McMahon and Brown 2009).

For smaller organizations, before deciding on the website type based on mission and reach, the nonprofit's leaders should also consider the vision of what they want the nonprofit to become. After answering this question, the leaders should determine if the proper choice for the nonprofit's current reach and mission is the same as it is for the vision of what they want the nonprofit to become. If the outcome of both decision sequences is the same then it is time to start looking for the right people or organization to design, build, and maintain the website. If the answers are different, then the leaders must decide if they are willing to endure the frustration as well as spend the time and money to retool in the future or if the organization should spend more now knowing what their needs will be in the future.

FUTURE RESEARCH

This data suggests that larger congregations are either not considering the websites in this way, are not aware of the differences, functionality, and impact of the different types of websites, do not have the necessary resources to retool their website, or do not consider it important. A deeper more qualitative investigation should be done with each organization to determine the reasons for larger congregations not choosing the right type of website. For the smaller congregations, an investigation should determine if the correct choice of static sites was planned or by chance.

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APPENDIX

Table 1
COALIGNMENT OF WEBSITE TYPE AND ORGANIZATIONAL REACH

(Reach)	Static Website	Dynamic Website	Content Managed Website	Portal
Local	Χ	Χ	X	
Regional		X	X	Х
National		Χ	X	X
Worldwide		X	X	X

Table 2
COALIGNMENT OF WEBSITE TYPE AND ORGANIZATIONAL MISSION

	Static Website	Dynamic Website	Content Managed Website	Portal
Present information to the general public (< 100 users)	X			
Present information to the general public (> 100 users)		X	X	X
Present information internally (< 100 users)	×	K		
Present information internally (> 100 users)		X	X	X
Sell Products / Service		X	X	X
Entertain		X	X	Х
Recruit Volunteers		X		
Expand Community		X	X	X

Table 3
Attend100 * WebTyp Crosstabulation

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			WebTyp		
			1.00	2.00	Total
Attend100	.00	Count	75	19	94
		% within Attend<100	79.8%	20.2%	100.0%
	1.00	Count	64	31	95
		% within Attend100+	67.4%	32.6%	100.0%
Total		Count	139	50	189
		% within Attend100	73.5%	26.5%	100.0%

