Nonprofit Adoption of Websites and Website Types

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The authors review the issues confronting nonprofit organizations, the adoption rate of websites, and the website types chosen by nonprofits. The types of websites to consider by size of the organization and focus of the organization are discussed. An analysis is done on a sample of 120 organizations from the state of Washington. The managerial implications address possible ways to optimize the use of resources for small and large organizations to be more competitive.

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. The focus of this article is to examine the adoption of websites by nonprofits. This is followed by an explanation of the different types of website design that these organizations should consider and which type to choose based upon the organization's mission, reach, and vision.

NONPROFIT CONCERNS

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 understanding whether or not nonprofits are adopting the use of the Internet and optimally deploying their resources when choosing their website.

SAMPLE

We chose a sample of nonprofits from the religiously affiliated segment of the nonprofit sector. The rationale for this is that this is the least researched segment of the nonprofit sector (Urban Institute, 2008). Specifically, we chose congregations that are churches of Christ. The rationale for this is threefold. First, these organizations are autonomous. This mitigates any effects due to a centralized initiative that could be the case in other affiliations or denominations. Second, these organizations are primarily focused on their local area. Third, their focus is external and internal.

METHODOLOGY

We began by getting a list of all congregations in the state of Washington. We then built a database of congregational information from available secondary data. We then developed protocols for manually checking to determine if each organization exists and if it has a website. For those organizations with a website, we then did an analysis of the website to classify it as static, dynamic, CMS, or portal. For this sample we found that if a congregation had a website, that website was of the static or dynamic variety; no CMS or portal websites were found. In terms of classifying the organizations by size, Damanpour (1992) suggests that it is better to pick a cutoff and use categories rather than attempt to use a continuous variable. In this study, we placed the cutoff at 100 for three reasons. First, in The United States, half of all congregations have fewer than 100 regularly participating adults (Washington Post, 2000; Hartford Institute for Religion Research). Second, the tables used from industry below suggest that a common cutoff point for this type of analysis is 100. Third, the average size of churches of Christ is approximately 100 (99.45).

HYPOTHESES

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, amid tightening budgets, all those surveyed recognized it as a necessity (Bhagat, 2005). Given this revelation, one would expect to find a significantly higher level of adoption of websites by 2011 in the nonprofit sector. However, Rogers (2003) states, "Many technologists believe that advantageous innovations will sell themselves, that the obvious benefits of the new idea will be widely realized by potential adopters, and that the innovation will diffuse rapidly. Seldom is this the case. Most innovations, in fact, diffuse at a disappointingly slow rate" (Rogers, 2003, pg.).

> *H1: The adoption rate of websites amongst nonprofits will be significantly lower than their stated necessity.*

In Rogers' foundational work in developing the theory of diffusion of innovation (1962), he suggested that larger organizations will be able to more quickly adopt new innovations.

As computer technology is adopted, organizations will become larger and more complex (Blau, 1968). Furthermore, larger organizations tend to be more secure than smaller organizations, thus being in a better position to take the risks associated with the adoption of a new innovation (Corwin, 1975). DeWar and Dutton (1986) found that large organizations are more likely to adopt an innovation than a

small organization. Guthrie (1999) found a statistically significant relationship between organizational size and use of the Net. In the most current edition of Rogers' work (2003), it states that the size of an organization is positively related to its level of innovativeness. Hence, it is more likely for the larger organization to adopt new technologies.

> *H2: The proportion of large congregations having a website will be significantly greater than the proportion of small congregations having a website.*

Having examined the adoption rates of websites by nonprofits (small versus large), it is now necessary to determine whether or not those nonprofits adopting websites are using the optimal type of website. First, we delineate the four types of websites. This is followed by two tables that link the vision, mission, and reach of the organization. This is followed by testing to determine if large and small organizations are using the right type of website. We conclude with the managerial implications and possible directions for future research.

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.

TABLE 1
COALIGNMENT OF WEBSITE TYPE AND ORGANIZATIONAL REACH

(Reach)	Static Website	Dynamic Website	Content Managed Website	Portal
Local	X	X	X	
Regional		X	X	X
National		X	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)	X			
Present information internally (> 100 users)		X	X	X
Sell Products / Service		X	X	X
Entertain		X	X	X
Recruit Volunteers		X		
Expand Community		X	X	X

*****These tables and the descriptions of the types of websites were provided by SETA, International, a leading technology outsourcing provider with operations on three continents.

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 target and reach the right audience and retain them (McMahon and Brown, 2009). One of the keys is to select and develop the right type of website for the desired audience.

HYPOTHESES

To determine whether or not small and large organizations are optimizing their resources in their choice of website types we propose the following hypotheses:

> *H3: Small congregations having websites will have a preference for the static type of website. That is, for small congregations with websites, the proportion of static websites will be significantly greater than the proportion of dynamic websites.*
>
> *H4: Large congregations having websites will have a preference for the dynamic type of website. That is, for large congregations with websites, the proportion of dynamic websites will be significantly greater than the proportion of static websites.*

RESULTS

Hypothesis 1

Our sampling efforts in the state of Washington yielded 120 usable congregations with valid secondary data. Of the 120 congregations, only 55 (46%) had a website presence. A 95% confidence interval estimate of the true proportion of congregations that have a website ranges from 37% to 55%. Our hypothesis is supported here, and we may conclude that the adoption rate of websites amongst nonprofits is lower than what should be expected.

Hypothesis 2

Of the 120 congregations examined, 90 fell in the small congregation size category (75%) and hence 30 were categorized as large (25%). The adoption rate for websites amongst the smaller congregations was just 32% (see Table 3 below). For large organizations, the adoption rate was 87% (see Table 3 below). These proportions are statistically significantly different ($p < .0001$) and support our stated hypothesis.

Hypotheses 3

Of the 120 congregations in our sample, only 55 had a website (46%). We have hypothesized that for congregations having websites, small congregations will tend to have static websites rather than the more costly and perhaps sub-optimal dynamic websites. 29 of the 55 congregations having websites were of the small classification. Amongst these congregations, 19 (66%) had static websites and 10 (34%) had dynamic websites (see Table 4 below). The 95% confidence interval estimate for the true proportion of small congregations having a static website ranges from 48% to 83%. The interval provides evidence that the proportion of static websites amongst smaller congregations is not necessarily greater than the proportion of dynamic websites and our hypothesis is not supported by the data. This may imply that small congregations are not optimizing their selection of website type and are, perhaps, spending inappropriately for dynamic websites.

TABLE 3
ATTENDCAT * WEBYN CROSSTABULATION

			WebYN		
			No Website	Website	Total
AttendCat	< 100	Count	61	29	90
		% within AttendCat	67.8%	32.2%	100.0%
	> 100	Count	4	26	30
		% within AttendCat	13.3%	86.7%	100.0%
Total		Count	65	55	120
		% within AttendCat	54.2%	45.8%	100.0%

Hypothesis 4

Of the 120 congregations in our sample, only 55 had a website (46%). We have hypothesized that for congregations having websites, large congregations will tend to have dynamic websites, typically thought necessary for outreach to larger audiences. 26 of the 55 congregations having websites were of the large classification. Amongst these congregations, 15 (58%) had static websites and 11 (42%) had dynamic websites (see Table 4 below). The 95% confidence interval estimate for the true proportion of large congregations having a dynamic website ranges from 23% to 61%. The interval provides substantial evidence that the proportion of dynamic websites amongst large congregations is not necessarily greater than the proportion of static websites and our hypothesis is, again, not supported. Large congregations may not be optimizing their selection of website type and are, perhaps, missing out on opportunities to reach a broader audience.

TABLE 4
ATTENDCAT * CLASSIFICATION CROSSTABULATION

			CLASSIFICATION		
			static	dynamic	Total
AttendCat	< 100	Count	19	10	29
		% within AttendCat	65.5%	34.5%	100.0%
	> 100	Count	15	11	26
		% within AttendCat	57.7%	42.3%	100.0%
Total		Count	34	21	55
		% within AttendCat	61.8%	38.2%	100.0%

MANAGERIAL IMPLICATIONS

The lower than expected adoption rate of websites raises two key issues. First, how will nonprofits meet the needs of those they serve? Nonprofits need volunteers and those are often drawn from external sources. The low adoption rate of websites means that less potential volunteers can be made aware of opportunities to volunteer. Given that a number of socially important programs are run by nonprofits and

that people are turning to the internet to do almost everything, nonprofits must create a web presence to meet the needs of those they serve and those that want to serve.

Second, how do large and small nonprofits do a better job of optimizing their use of resources as it pertains to a website? For large organizations, the explanation of these findings could be threefold. First, the over abundance of static websites being used by large nonprofits could be explained by static sites being the default type that novices opt for and that those who decided to start the website did not have the knowledge or savvy to choose the best type of website for the organization. Second, this could be due to nonprofits not having the kind of dedicated resources that for profits have and the person that was tossed into this role simply went with the simplest most convenient form available. Third, it could be that the large organizations were small and grew large, in which case, they should consider the implications suggested below for smaller organizations.

However, if this is not the case, then larger nonprofits need to rethink their websites in terms of the best use of resources. 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 and volunteers which will help to alleviate the aforementioned budgetary pressures (McMahon and Brown, 2009).

For smaller nonprofits, 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 their 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. Outside of this data set, further investigation should be done in other geographic areas to determine if these results are typical of this segment of the nonprofit sector and of the nonprofit sector in general. Additional studies can be conducted to determine the variables that directly impact the adoption of websites and the use of other internet communication technologies.

REFERENCES

Bhagat, V. (2004). *The New Marketing Model for Nonprofits*. Location: Publisher.

Blau, Peter. (1968). The Hierarchy of Authority in Organizations. *American Journal of Sociology*, 73, 453-467.

Chadwick, T. (2005). How Search Engine Marketing Tools Can Work For You. *Information Outlook*: July, 9(7), p. 23-29.

Chadwick, T., (2005). How search engine marketing tools can work for you, *Information Outlook*, Oct, 9(10), p. 28-36.

Chiagouris, L. (2005). Nonprofit brands come of age. *Marketing Management*, Sept/Oct, p. 30-33.

Corder, Kevin. (2001). "ACQUIRING NEW TECHNOLOGY: Comparing Nonprofit and Public Sector Agencies," Administration and Society: May, 33, 2, 194-219.

Corwin, Ronald G. (1975). "Innovation in Organizations: The Case of Schools." *Sociology of Education* 48:1—37.

Damanpour, Fariborz (1992). "Organizational Size and Innovation." *Organization Studies*, 13(3), 375-406.

Dewar, R. D. and J.E. Dutton. (1986). "The Adoption of Radical and Incremental Innovation: An Empirical Analysis." *Management Science* 32:1422-1433.

Ebaugh, H. R., Chafetz, J. S., & Pipes, P. (2005). Funding good works: Finding sources of faith-based social service coalitions, *Nonprofit and Voluntary Sector Quarterly*, Dec, 34(4), p. 448-472.

Guthrie, Doug. (1999). "A Sociological Perspective on the Use of Technology: The Adoption of Internet Technology in U.S. Organizations." *Sociological Perspectives* 42:583—603.

Hooper, P., & Stobart, S., (2003). Using third party services to reduce the development cost and improve the effectiveness of charity websites. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8,(4), p. 328-336.

McMahon, D. & Griffy-Brown, C. (2009). Determining an Effective and Affordable Search Engine Marketing Methodology for Nonprofits. *International Journal of Internet Marketing and Advertising*, 5, No. 1-2, 113-130.

Moran, M. & Hunt, B., (2006). Search engine marketing, inc. Driving search traffic to your company's web site. Upper Saddle River, NJ: IBM Press.

Naddaff, A., (2004). Branding by design: How nonprofits can fight for dollars with a strong visual presence, *Communication World*, Sept/Oct, p. 18-21.

Nucifora, A., (2005). Marketing solutions for the beleaguered not-for-profit. *Information Executive*, Feb, 8(7), p. 78-81.

Rogers, E.M. (1962). *Diffusion of Innovations.* New York, NY: The Free Press.

Rogers, Everett M. (2003). *Diffusion of Innovations.* 5th ed. New York: The Free Press of Glencoe.

Sheh, J. (1993). "User-oriented marketing for nonprofit organizations." In D. Hammack and D. Young (Eds), Nonprofit organizations in a market economy: Understanding new roles, issues, and trends. San Francisco: Jossey-Bass.