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A Framework for Measuring People's Intention to Donate Online

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Abstract

Despite the overall economic and social importance of nonprofit organizations and the plethora of scholarly literature written on online payments, few authors have combined these two issues to take a look at online donations. Accepting donations online helps nonprofits, which typically face budgetary constraints, to accomplish their tasks more effectively and efficiently and to put their resources to use where they are needed most. In this paper we first present a framework that illustrates several antecedents of online donations. We use the results of two surveys to test the scales we have developed and present the respective factor loadings. After discussing the descriptive results, we compare two user groups (members of nonprofits and students) regarding their attitudes toward online donations. The results suggest that most of the scales we present exhibit sufficient validity and that significant differences between the two groups exist. While the former is useful for researchers planning to conduct an empirical survey to assess the importance of online donations, the latter results demonstrate the applicability of our instrument to segment user groups according to their preferences. This can help nonprofits to address their (prospective) members with better target communication efforts.

Keywords: Online donations, nonprofit organizations, trust, donor behavior

1. Introduction

Nonprofit organizations seek to effect positive change for the public good. In order for them to fulfill their mission they are dependent on donations from the general public (Guy and Patton 1989). Over the past decade, the Internet has become an indispensable communication channel, supporting the work of nonprofit organizations in two ways. First, it helps them to disseminate information and communicate with audiences more rapidly and, second, it functions as a fundraising channel (Hooper and Stobart 2003). Offering information, interaction and fundraising capabilities to nonprofits, the Internet has opened up unparalleled opportunities for nonprofits to further their causes and enter into relationships with current, lapsed and potential donors.

However, nonprofits typically have limited skills, time and budget available to develop and maintain sophisticated Web sites (Hooper and Stobart 2003). In addition, they often face the problem that the expenses associated with building and maintaining a website are perceived as a waste of their members' fees (Wenham, Stephens and Hardy 2003). An additional challenge in online fundraising is the Web's nature as a pull medium, which entails that site traffic is a determinant of the volume of donations collected online. Even regular donors of a particular nonprofit organization may never visit its website, unless it offers vital information, e.g. in the area of health (Sargeant 2001). Despite these challenges, more and more nonprofits compete for donations online.

This work-in-progress study seeks to identify factors fostering or hindering people's propensity to donate online. It first reviews the relevant literature and presents a framework identifying the antecedents of online fundraising, before it introduces the research design. It then goes on to present and discuss the findings of a survey conducted among donors and non-donors, including a student sample serving as a control group.

2. Previous Research

This section reviews the literature on charitable giving and altruism to identify the factors potentially influencing people's decisions to donate money to a charitable organization. People's giving behavior is affected by demographic factors such as age (Nichols 1992), gender (Hall 2004), income (Schlegelmilch et al. 1997), education (Edmundson 1986) and religious beliefs (Jackson 2001). People may also be motivated to donate by intrinsic factors, which stem from the fundamental human desire to help those in need (Guy and Patton 1989). However, this need is moderated by people's varying philanthropic disposition, which is either innate or acquired (Brady et al. 2002). Potential donors are likely to make donations if both their attitudes toward helping and their attitudes toward charitable organizations are positive (Webb et al. 2000).

Another reason why people donate is that they expect to receive material or immaterial benefits in return for their donations (Andreasen and Kotler 2003). Immaterial benefits derived from donating to a charitable organization include feelings of higher self-esteem and public recognition or relief from guilt (Amos 1982; Dawson 1988). Material benefits derived from donations could be the tax deductibility of the amount donated (Lankford and Wycoff 1991).

The organization receiving the donations also plays a crucial role in people's propensity to give. First, emotional attachment to a particular organization may be a factor that motivates them to donate to this organization (Brady et al. 2002). Further, their intention to donate is determined by their trust in the organization receiving the donation (Cheung and Chan 2000). Focusing on donor perceptions of the recipient organization, Sargeant et al. (2006) found that trust in the receiving organization determines people's commitment to it, which again stimulates giving behavior. Their research has also shown that people's perception of the organization's fundraising communication as well as the performance of the organization determine the level of trust they have in the organization, while their commitment is dependent on the emotional and familial utility their donations provide them with.

Previous research also indicates that the way in which an organization designs its fundraising campaign has an impact on the amount of donations it receives. People have

been found to give more, if they are approached in a way they consider appropriate (Frey and Meier 2004). Also, the number of times an individual is approached by an organization is an influential variable (Schlegelmilch et al. 1997). Bennett and Barkensjo (2005) found that a nonprofit's relationship building efforts have an impact on donor behavior. Desmet and Feinberg (2003) report that suggesting a set of amounts to potential donors when making donation requests has an impact on their donor behavior, albeit a smaller one than personal characteristics.

Although the speed and the convenience of payment transactions over the Internet may seem appealing to donors, the nature of the medium has potentially negative ramifications that may deter them from donating online. First, if potential donors visit a nonprofit's website, they may not donate online if they perceive the Internet as an unreliable and untrustworthy payment channel. In particular, security concerns (Pollach, Treiblmaier and Floh 2005) and people's fear of privacy intrusions (Clarke 1999), e.g. when data collected about them are shared with third parties without their consent, may influence their decision to donate online. Further, users may perceive a website as cognitively complex and may abort the donation process, even if they had intended to donate online.

3. A Framework of Online Donor Behavior

The factors outlined above pose serious challenges to nonprofits seeking to raise funds online. Donors may end their relationship with the organization receiving their money at any time without any serious effects for them, if they are not comfortable with the cause the organization supports, the way it is run, or the way it handles online donations. The framework presented in Figure 1 combines extrinsic factors assumed to influence people's intention to donate online. These factors pertain to the cause for which donations are solicited, the organizations asking for the donations, and the Internet as the transaction medium. Since intrinsic, motivating factors have been dealt with exhaustively in the literature, they were not considered for this framework. We argue that people's trust in the project and the organization and the Internet will have a bearing on their general attitude towards donating online, which we hypothesize to influence their intention and, ultimately, also their behavior.

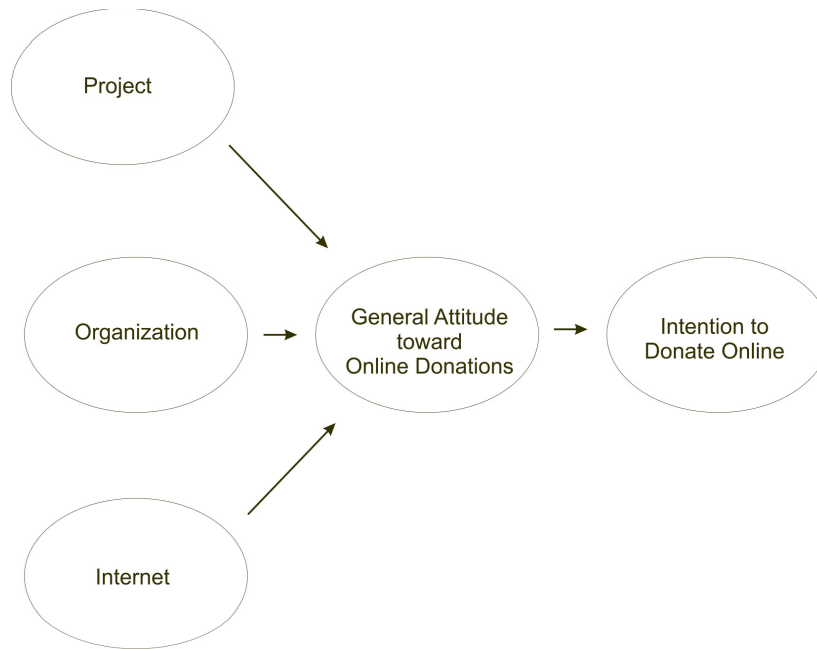


Figure 3: A framework of online donor behavior

4. Research Design

In view of the scant attention previous research has paid to donor behavior online, this paper examines the factors fostering and inhibiting online donations. To determine how much influence donor-external factors have on people's willingness to donate online, a survey was conducted focusing on factors pertaining to the organization, the cause, the Internet, and the payment transaction.

The Austrian Red Cross and the Austrian chapter of the World Wide Fund for Nature supported us by sending out a newsletter to their members including a link to an online questionnaire and asking recipients to complete the questionnaire. No incentive was given for filling out the questionnaire. A pretest, including qualitative interviews with experts, was carried out to ensure that all questions were comprehensible. The website hosting the questionnaire used sliders to generate a magnitude scale from 1 to 100 instead of the commonly used Likert-type scales to determine people's attitudes towards the constructs included in our framework. Slider scales have been shown to comprise a number of advantages, such as their ease of use and the avoidance of a central tendency (Treiblmaier et al. 2004). A total of 100 questionnaires were filled out completely. To supplement this sample, we conducted a second survey amongst students to be able to identify significant attitudinal differences. The second survey resulted in 122 responses, increasing the total sample size to 222.

Overall, the study seeks to answer the following research questions:

(1a) Are the members of the nonprofits aware of the opportunity to donate online?

- (1b) Are those members of nonprofits who have had no previous knowledge of the opportunity to donate online willing to use the Internet for donations in the future?
- (2) How well suited are the scales we used for measuring the proposed constructs?
- (3) Are there any attitudinal differences between students and nonprofit members?

Question (1a) looks at the success of the nonprofits' communication strategies, while question (1b) is directed toward measuring the potential future success of making users aware of the opportunity to donate online. Since many of the items we used are newly developed or adapted from previous research, question 2 considers whether the scales exhibit sufficient levels of validity and reliability. After testing the scales we use the respective means to illustrate how they can be applied. Differentiating between students and members of nonprofit organizations, question 3 takes into account whether there are significant differences between these two groups regarding their attitudes toward online donations.

5. Results

The respondents were 45.9% male and 54.1% female, with the majority being frequent Internet users who are online between 10 and 20 hours a week. More than half of the respondents were students, one quarter were white-collar employees and the remaining respondents were blue-collar workers, self-employed, retired or homemakers. Also, the overwhelming majority of respondents had completed high school.

Table 1: Characteristics of Respondents (n=222)

<i>Sex</i>		<i>Occupation</i>		<i>Internet Experience</i>	
Male	45.9%	White-collar	25.2%	Beginner	0.0%
Female	54.1%	Blue-collar	0.5%	Occasional User	9.9%
		Self-employed	5.0%	Frequent User	61.7%
		Homemaker	0.9%	Expert	28.4%
		Retired	2.3%		
		Student	56.3%		
		Other	9.8%		
<i>Age</i>		<i>Education</i>		<i>Frequency of Internet Use</i>	
13 –19 yrs	5.6 %	Some high school	1.0%	1-9 h/week	13.6%
20 – 29 yrs	62.0 %	High school grad.	70.6%	10-20h/week	49.5%
30 – 39 yrs	17.8%	College/Univ.	23.1%	20+ h/week	36.9%
40 – 49 yrs	10.8%	Other	5.4%		
50+	3.8%				

Note: Figures may not add up to 100% due to rounding differences.

We asked the subscribers of the nonprofits' mailing lists whether they had known that they had the possibility to donate online. Out of 96 respondents, 60 indicated that they were informed about this possibility. Table 2 compares the respondents' current

knowledge of the opportunity to donate online with their future intention to do so. It also shows the actual and the expected cell counts for a standard chi-square test of independence. A chi-square statistic of 19.83 with one degree of freedom (p value ≈ 0) indicates that significant differences between the cells exist. From the nonprofits' standpoint it is noteworthy that the number of users with no previous knowledge who indicate that they would donate in the future (11) is considerably lower than it would be in the case of equal distribution. This suggests that even if nonprofits successfully communicate the option of donating online to potential donors, the response from the users may be less than they expect. Put differently, those users who are more technologically savvy and therefore more inclined to give money online already know about this opportunity.

Table 2: Knowledge and Intention of Donating Online (n = 96)

		<i>In the future, I will donate online for XY</i>		
		<i>Yes</i>	<i>No</i>	<i>Total</i>
<i>I knew that XY accepts online donations</i>	<i>Yes</i>	46 (35.6)	14 (24.4)	60
	<i>No</i>	11 (21.4)	25 (14.6)	36
	<i>Total</i>	57,0	39,0	96,0

Note: Numbers in brackets denote the expected values in the case of equal distribution.

In a next step we tested the scales we used. Since various items have been newly developed or have been adapted and substantially modified from previous literature, it is necessary to treat them just like newly developed scales (cf. Kettinger et al. 1999). The means, standard deviation and the correlations between the constructs can be found in Table 3. With the exception of one scale (trust in the organization), all scales exceed the minimum level of reliability (0.7), which was proposed by Nunnally (1978) and is frequently used in scholarly papers. The respective factor loadings, which were gained by conducting an exploratory principal component analysis with Varimax rotation, can be found in the appendix. The Kaiser-Meyer-Olkin measure of sampling adequacy (MSA), which indicates how well the data set is suited for factor analysis was .71, which is referred to as 'middling' by Kaiser et al. (1974). Overall, the item loadings reflect the hypothesized structure with the exception of the items reflected in the constructs 'Trust in the Internet' and 'Attitude toward donating online', which both load on the same component. Not surprisingly, both scales show a high level of correlation (.81).

Table 3: Descriptive Statistics, Reliability and Correlations (n = 222)

	Mean	SD	α	1	2	3	4	5	6
1. Type of project	79.5	20.6	.73						
2. Location of project	74.4	19.2	.71	-.18**					
3. Trust in the organization	76.9	15.8	.55	-.02	-.01				
4. Trust in the Internet	58.3	29.5	.74	-.19**	.32	.12			
5. Anonymity	59.1	29.0	.88	-.04	.01	-.01	.12		

6. Data Usage	44.0	20.0	.92	-.17*	.09	-.19**	.12	-.12
7. Intention to donate online	69.7	21.6	.83	-.14*	.30**	-.15*	.81**	.15* .12

Note: Pearson Correlation, * p <.05, ** p <.01

In order to determine whether our scales can be used to discriminate between different user groups, we compared our sample of nonprofit members with our student sample. After applying a Levene-test to account for the similarity of variances we used a *t*-test to account for differences in means. As can be seen in Figure 4, students tend to value their anonymity as donors significantly higher than members of the nonprofits do ($p < .01$). They also care more about the type of project for which they are donating and less about the location of the project ($p < .05$). Furthermore, they have less trust in the Internet and in the proper use of the data ($p < .05$). Accordingly, the students exhibit a significantly lower intention to donate online than people who are members of nonprofits ($p < .05$). No significant differences can be found regarding trust in the organization.

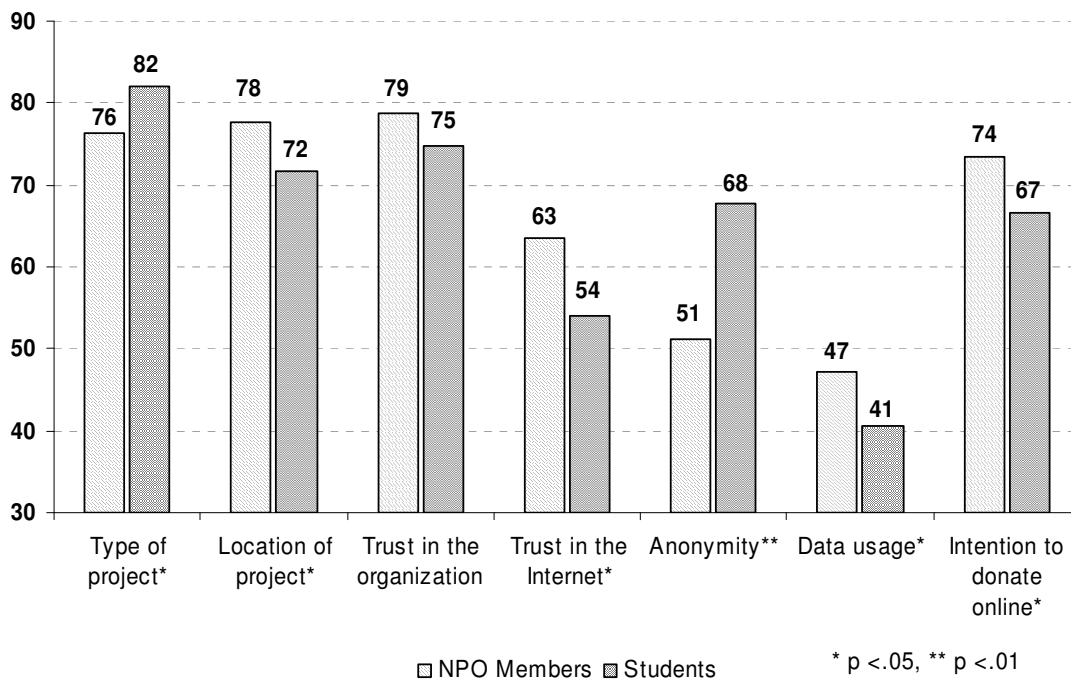


Figure 4: Comparison of Nonprofit Members and Students (n=222)

6. Conclusions and further research

We have presented a framework to assess the importance of a variety of external factors that may shape users' general attitudes toward donating online and, most likely, their further intention and behavior. We have used survey data to assess both the applicability of our scales and to present results that might be of interest to fundraising managers in nonprofit organizations. As our research has shown, the majority of nonprofit members are already aware of the opportunity to donate online. A comparatively low proportion of those members who did not know about this opportunity are willing to donate online in

the future. However, if this donation channel already exists, we recommend that nonprofits strongly point this out to their members. Their communication efforts targeted at their supporters should not only convince them of the cause that their donations support but, more importantly, of the convenience and security of online fundraising in order to turn offline donors into online donors. This saves costs and nonprofits may even be able to benefit financially from the spontaneity associated with the speed of online transactions.

Further, the results of the survey have largely confirmed the external antecedents of online donating proposed in our framework. However, more research and analysis is needed to improve the scales to be able to develop a more elaborate model of online fundraising. Furthermore, we have shown that our scales are able to discern among different user groups. Significant differences between our student sample and the nonprofit-member sample have been found concerning their attitudes toward donating online. Although the survey has yielded useful results, the findings are clearly limited in that the sample includes only Austrian respondents, who may not be representative of donors in other countries. Therefore, we explicitly recommend follow-up studies in other countries using different samples.

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Appendix: Questionnaire Items and Factor Loadings

	Components					
	1	2	3	4	5	6
Type of project						
If I donate to support a nonprofit organization, I don't care for which project they use my money*				-.828		
I prefer donating for a particular project to making donations that are not earmarked				.835		
Location of project						
It is important to me that my donation supports a good cause in Austria*					-.724	
I donate to nonprofit organizations even if they use these funds for projects abroad					.808	
Trust in the Organization (based on Torkzadeh et al. 2002, Pavlou et al. 2004)						
It is important to me that external supervisory bodies audit the organization's use of donations			.480			-.437
I only donate to nonprofit organizations if they have a proven track record				.726		
How important are the following criteria to you when donating online: The organization is well known				.751		
How important are the following criteria to you when donating online: The organization has a good reputation				.871		
Trust in the Internet (based on Salisbury et al. 2001)						
In my opinion the Internet is a secure medium for transmitting payment details				.752		
It is easier for me to donate via the Internet than remitting money via bank transfer				.787		
Anonymity						
I prefer to remain anonymous when donating online			.926			
I prefer to remain anonymous when making donations of any kind			.932			

Data Usage (based on Graeff et al. 2002)

I believe that legal regulations pertaining to the use of credit card information are sufficient	.719
In my opinion donors are well informed how nonprofit organizations use the data they collect about their donors	.727

Attitude toward Donating Online (based on Treiblmaier et al. 2004, Sawyer et al. 1991)

Donating online is generally problematic – unproblematic	.853
Donating online is generally not secure – secure	.819
Donating online generally takes a lot of time – saves time	.682
Donating online is generally inconvenient – convenient	.716

Note: We used a 100-point Slider scale with possible responses ranging from Strongly Disagree (1) to Strongly Agree (100). Factor loadings lower than .40 have been excluded for better readability. The survey was originally conducted in German and translated into English by the authors.

Method: Principal Component Analysis with Varimax Rotation

* Reverse Coded