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Voluntary Actions in Times of Disaster\*

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Discussion Paper 2014-004-E

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\*This research was conducted as part of “The Private Aid Initiatives in the Great East Japan Earthquake” co-organized by the Japan NPO Research Association (JANPORA)” and the Japan NPO Center (JNPOC). The project is supported by “Takeda Inochi to Kurashi Saisei Program Grant.” Part of this paper is based on a presentation made by Okada on April 20, 2014 at NPO Research Forum organized by Japan NPO Association (JANPORA) at Osaka University.

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# Role of Information in Mobilizing the Public towards Voluntary Actions in Times of Disaster\*

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When a major disaster occurs, people become highly motivated to provide resources for those directly affected by the tragedy. In this paper, we argue that nonprofit organizations have a special role to play in mobilizing these potential supporters by providing opportunities to transform their desire into actual actions. The key in doing so lies in how nonprofits transmit information about the opportunities to take voluntary actions. We present the findings from an online survey conducted to nonprofit organizations that mobilized the public towards voluntary actions in the aftermath of the Great East Japan Earthquake in 2011.

**Keywords:** Nonprofit Organizations, Information Transmission, Disaster, Great East Japan Earthquake, Media, Social Media

大規模な災害が発生すると、金銭や時間、労働力など、自らが所有する資源を直接的な被害を受けた人々のために提供したいと願う人々が増加する。本稿では、こうしたボランタリーな行動に対して高いモチベーションを持つ人々に対し、実際に行動を起こす機会を提供する非営利組織（NPO）の役割に注目する。その鍵は、寄付やボランティア、物資の送付といったボランタリーな行動に関して、NPO がどのような情報発信を行うかにあるのではないかと考える。このような視点から、東日本大震災（2011年）に際してNPOが行ったボランタリーな行動に関する情報発信の実態調査を行った。本稿は、その結果を報告するものである。

キーワード：非営利組織（NPO）、情報発信、災害、東日本大震災、メディア、ソーシャル・メディア

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## 1. Information on Voluntary Actions

Disasters are one of the uncommon events that stimulate the willingness of the people to help those in need. Be it an earthquake, tsunami, or volcano eruption, these catastrophes trigger shocks among the people who observe the tragedy, leading many of them to immediately consider what they can do to help those in need. Solnit, in her 2009 book, call such phenomenon “A Paradise Built in Hell.”

The triple disasters of earthquake, tsunami, and nuclear threat that struck Northeastern Japan on March 11, 2011 was indeed one of such events. The disaster, or what came to be known as the Great East Japan Earthquake (*Tohoku Dai-Shinsai*), encouraged a fair amount of people across the world to take voluntary actions for those who suffered from the disaster. For example, in a post-disaster survey by Japan NPO Research Association (2012), 75.6 percent of the respondents took some sort of voluntary actions including making donations, volunteering, purchasing products of affected regions, sending/delivering goods to affected regions, and volunteering. In another post-disaster survey by the Cabinet Office of Japan (2013), 59.5 percent of the respondents had taken some sort of voluntary actions in the aftermath of the Great East Japan Earthquake.

In this paper, we argue that nonprofit organizations have a special role to play in mobilizing these potential supporters by providing actual opportunities to transform their desires to help into actual actions. The key in doing so lies in how nonprofits transmit information about the opportunities of voluntary

actions. We shed light to the way nonprofit organizations in Japan provided information following the Great East Japan Earthquake to the people willing to help those in need. We argue that in times of disaster, information is what links desires of potential supporters to help and financial or labor needs of nonprofit organizations. When a disaster strikes, many nonprofits immediately being to organize response actions. In the process, many of these organizations look for donations, volunteers, and/or in-kind giving.

Findings from the aforementioned surveys also revealed that information indeed played a key role in leading the potential supporters to actual actions. Figure 1 shows factors that directly triggered people to make financial contributions for relief activities following the Great East Japan Earthquake (JANPORA, 2012). While being interested was the major reason, answers that followed indicate the high level of importance that information has in encouraging financial giving. It was the information that came through the Internet, newspapers, and/or televisions that led the potential supporters to transform their desire into actual actions. Information that came from places close to one’s daily life - on the street, at workplaces, schools, or in a neighborhood – were also effective in encouraging people to make financial contributions. These triggers directly related to information, interestingly, contributed far more than whether the donor was able to financially afford making a donation. Figure 2 further shows that information was also an important trigger for those who sent or delivered goods to communities affected by the Great East Japan Earthquake.

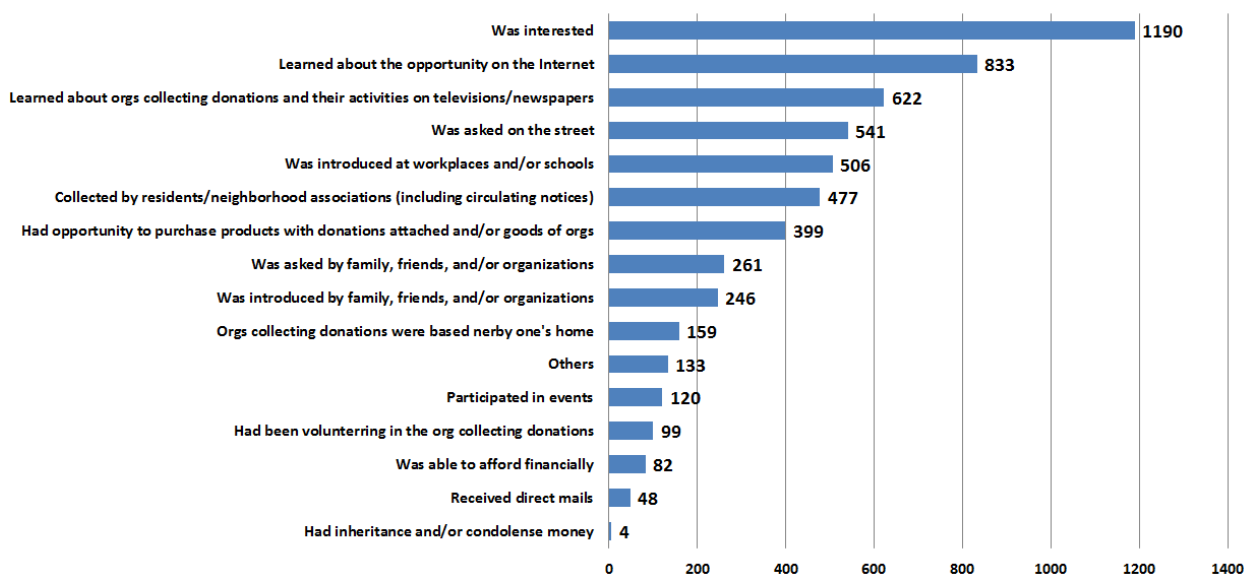


Figure 1 Direct Triggers for Making Financial Contributions (N=3,481)

Source: Graph created by Okada from JANPORA (2012)

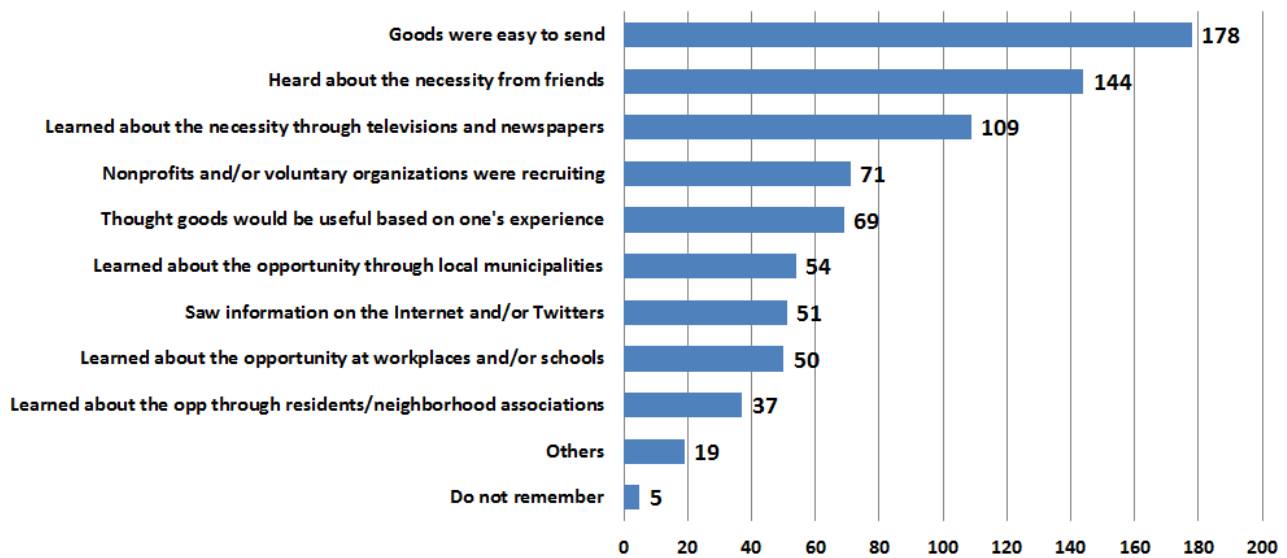


Figure 2 Direct Triggers for Sending Goods (N=422)  
 Source: Graph created by Okada from JANPORA (2012)

Survey by the Cabinet Office of Japan (2013) also showed – rather paradoxically – the importance of information in mobilizing the public towards voluntary actions. When asked about the reasons for *not* taking voluntary actions in the aftermath of the disaster, 36.5 percent of the respondents answered that they did not know what to do. Another 12.6 percent mentioned lack of information. Had these people learned about specific opportunities to take voluntary actions, their motivations may have turned into actual actions.

Despite the key role that information play in mobilizing the public towards voluntary actions in times of disaster, little is known about how information are transmitted from those who provide voluntary opportunities. In this paper, we highlight nonprofit organizations as such source of information. To understand how nonprofits transmit information to potential supporters, we conducted an online survey to organizations that were engaged in response operations following the Great East Japan Earthquake. When a disaster struck, how did these nonprofit organizations transmit information about voluntary actions? What media or communication channels did they use? How often did they try to reach those willing to give a helping hand? How effective were their information transmission? Following a brief review of related literature, we present the findings of these questions.

## 2. Information and Voluntary Actions: Literature Review

Information is one of the buzz words that often become the

subject of discussion in the context of disasters. Information is critical for saving lives in unexpected catastrophes – the question of how to provide effective warning, as well as how to organize evacuation is all about how effectively relevant agencies can transmit information to those under risk (e.g. Yamori, 2013). Some also argue that information sharing holds the key in facilitating communication among responding organizations for effective relief activities (Comfort *et al.*, 2004).

Studies from the field of communication also argue that information holds the key in facilitating voluntary actions among the public when a disaster happen. Particular focus has been on the effect of information transmitted through mass media, including televisions and newspapers, on giving behavior. Benthall (1993), for example, argued that media broadcasts about a particular disaster determines the intent of giving among potential contributors. Studies have also highlighted the volume of television broadcasting as an influential factor on giving (Simon, 1997), as well as exposure to disaster-related news (Oosterhof *et al.*, 2009).

In the context of the Great East Japan Earthquake, Miura (2012), using data provided by Matsuyama, examined relationships between the number of times the name of affected municipalities was mentioned in key news television shows (counted as “Appearance in TV News”) and the amount of relief money<sup>4</sup> as well as the number of volunteers that flowed

<sup>4</sup> “Relief money” refers to condolence money that are directly given to residents affected by the disaster in from of cash by the municipalities.

into specific municipalities. As shown in Table 1, we learn that appearance in TV news is not determined by percentage of deaths or those missing within the population. However, the amount of relief money and the number volunteers do seem to flow into municipalities that were frequently mentioned in TV news. Miura reports that preliminary correlation analysis revealed a correlation coefficient of 0.96 for relief money, and 0.69 for volunteers. While data on donation and volunteer are incomplete in Miura's analysis, the study does imply that media broadcast have an influence on where the public choose to provide their voluntary actions.

Table 1 Comparison of Top Five Municipalities in Appearance in TV News

	Appearance in TV News	Donated Relief Money (10 thousands)	Number of Volunteers	Percentage of Deaths/Missing
Sendai City, Miyagi Prefecture	2,789	95,466	54,302	0.10%
Ishinomaki City, Miyagi Prefecture	2,789	90,545	108,760	2.40%
Minamisanriku Town, Miyagi Prefecture	2,180	67,905	47,514	5.20%
Rikuzentakata City, Iwate Prefecture	1,786	-	90,697	8.40%
Kesennuma City, Miyagi Prefecture	1,764	64,100	30,254	1.90%

Source: Created by Okada from Miura (2012), p.53.

Not only are *quantity* of information about the disaster important, but *quality* of information also affects people's prosocial behaviors. Bendapudi *et al.* (1996) found that presentation of information affects the viewers' charitable impulse. Likewise, Benett and Kottasz (2000) argued that what is presented in the news - indigency of aid recipients, portrayals of people helping themselves, and highly emotive advertising imagery – matters in one's determination to make financial contribution. They also argue that focusing on factual information and presenting the crisis's positive stories during news broadcasts is effective in attracting interests of individuals living in distance from where the event is taking place.

Some studies delve deeper into the mechanism through which people are motivated to give when exposed to media reports on disasters. Waters (2009), for example, argue that it is the cognitive dissonance – felt psychological discomfort that triggers inconsistent mental state – that motivates people to donate to disaster relief efforts to reduce such feelings to restore mental balance.

While rich implications can be drawn from these studies

about how information leads the audience or the viewers to take voluntary actions in times of disaster, little has been understood about involvement of nonprofits in such mobilization. Mass media, indeed, are not the only actors that provide information about disasters. Nonprofit organizations, who seek to fulfill financial and labor needs for its relief activities, also provide and transmit information about disasters and opportunities for voluntary actions.

Waters and Tindall (2011) is one of the few studies that highlight nonprofit organizations in mobilizing voluntary actions in disaster context. Given the influence of mass media in stimulating such actions, they recommend nonprofit organizations to seek for mediated-crisis model of fundraising as illustrated in Figure 3. Analyzing charitable giving in response to the December 2004 Asian tsunami, the study found that media coverage impacts traditional giving, i.e. donations made directly to nonprofit organizations, as well as e-philanthropy through third party outlets such as Amazon.com and eBay auctions. Nonprofit organizations (labeled as 1 below) are to use traditional media such as televisions and newspapers (labeled as 2) as well as digital media to approach the public (labeled as 3).

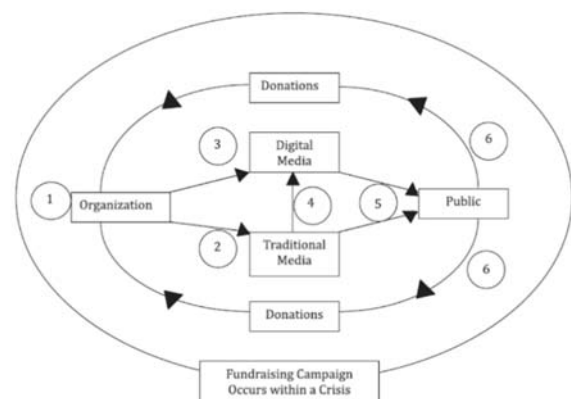


Figure 3 The Mediated-Crisis Model of Fundraising

Source: Waters and Tindall, 2011, p.33

While nonprofits may well consider use of multiple types of media or communication channels, our understanding about how nonprofit organizations actually transmit information in times of disaster is limited. To what extent are nonprofits able to apply mediate-crisis model of fundraising advocated by Waters and Tindall? What communication channels do they use, and how effective are their approach? What types of media or communication channels do nonprofits wish to use but are unable to do so? To examine these questions, we conduct an

online survey to nonprofit organizations that engaged in relief activities in the aftermath of the Great East Japan Earthquake and transmitted information to mobilize voluntary actions. To our knowledge, this is the first study that attempt to understand nonprofit organizations in Japan as transmitters of information on voluntary actions in times of disaster.

### 3. Study

In this section, we explain the details about the online survey conducted to understand how nonprofit organizations transmitted information to mobilize the public towards voluntary actions for relief activities in Northeastern Japan.

#### 3.1. Target Organizations

To understand the range of nonprofit organizations that solicited voluntary actions at the time of the Great East Japan Earthquake, we first developed a list of organizations participating in Japan Civil Network for Disaster Relief in the East Japan (JCN). JCN is “a broad coalition of Japanese NPOs, NGOs, CBOs, and Private Enterprises providing disaster relief, formed in order to support those affected by the March 11, 2011 East Japan Earthquake” (JCN, 2014). We believe that member organizations of JCN is the best possible list of nonprofit organizations that were active in the aftermath of the Great East Japan Earthquake.

From this list, we identified nonprofit organizations that have one of the following legal status in Japan: “specified non-profit corporation,” “public interest incorporated association,” “public interest incorporated foundation,” “general incorporated association,” and “general incorporated foundation.” For 434 of these organizations, we were able to extract an active email address.

A request for survey participation was sent to these 434 organizations via email with a link to the survey constructed using SurveyMonkey. We opened the site between February 3, 2014 and March 24, 2014. A total of 143 organizations provided answers, resulting in a collection rate of 32.9 percent. Because five organizations skipped the question that asked for the name of the organization, we were unable to identify their attributions. Analyses provided below thus excludes these five organizations.

Figure 4 shows the legal status of nonprofit organizations that participated in our survey. 80 percent of the respondents were specified non-profit corporation, while 10 percent were general incorporated associations.

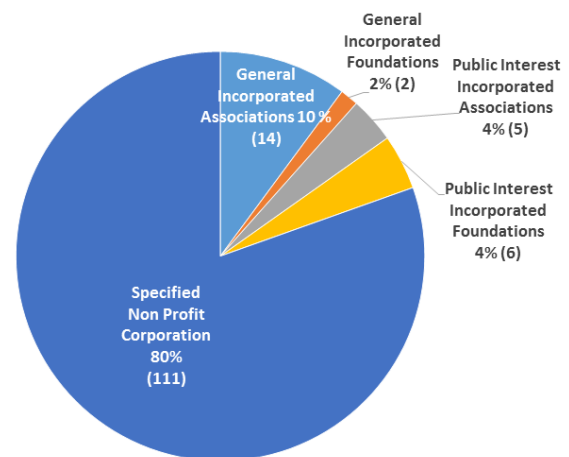


Figure 4 Legal Status (N=138)

Looking at location of respondents, we see that a little less than half of the responding organizations are based in Kanto, around Tokyo metropolitan area. Please note that in case the organization has multiple branches, location of its headquarter was coded. Following Kanto was Tohoku, or Northeastern Japan, majority of which were based in the three affected prefectures: Iwate, Miyagi, and Fukushima.

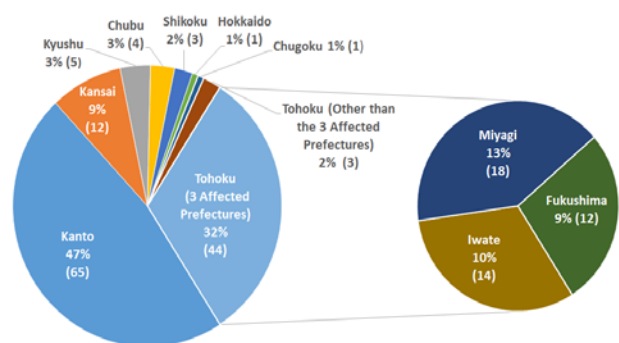


Figure 5 Location of Headquarters (N=138)

Also worth noting among the respondents is the timing of founding. While 73 percent of the respondents had existed prior to the catastrophe, 27 percent (37 organizations) were newly established after the disaster.

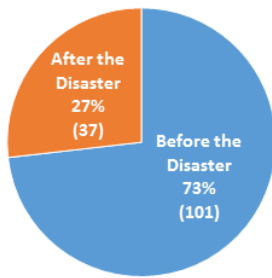


Figure 6 Timing of Founding (N=138)

What kinds of voluntary actions did responding nonprofit organizations solicit among the public? In the survey, we mainly focus on three voluntary actions: collecting donations, recruiting volunteers, and collecting goods to be delivered to affected regions. Figure 7 shows that approximately 65 percent of the organizations were involved in collecting donations and recruiting volunteers, while 54 percent were involved in collecting goods. In the section below, we focus on collecting donations and recruiting volunteers in analyzing information transmission of nonprofit organizations.

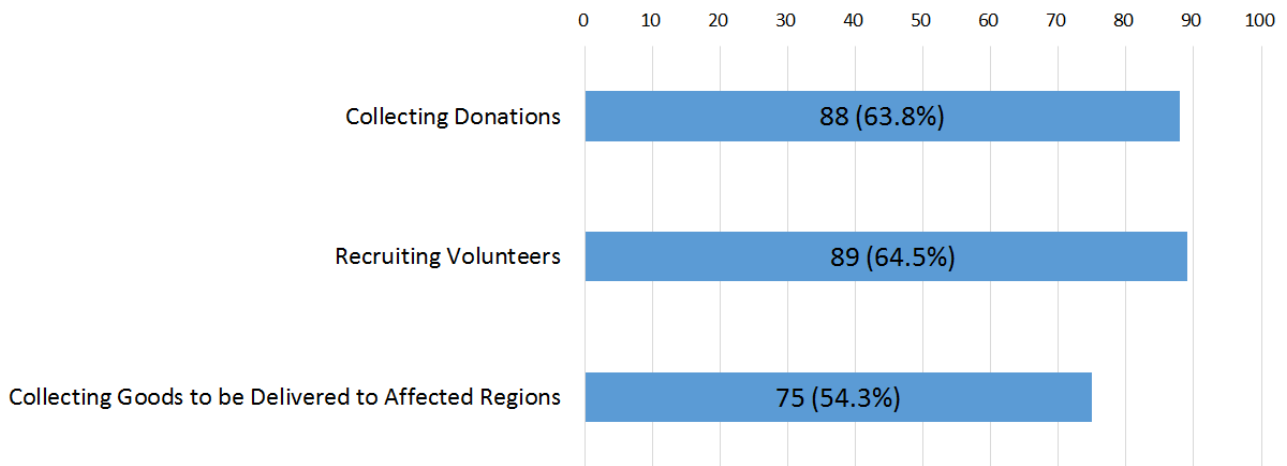


Figure 7 Solicited Voluntary Actions (N=138)

#### 4. Results

In this section, we provide the results obtained of the survey conducted to nonprofit organizations engaged in relief activities in the aftermath of the Great East Japan Earthquake in 2011. We organize the findings in three perspectives: media use, frequency of information transmission, points to emphasize, and perceived effectiveness.

##### 4.1. Use of Communication Channels

When a disaster strikes, nonprofit have variety of media to use. Available tools range from websites, blogs, listserv, televisions, newspapers, and to social media such as Facebook and Twitter. Holding an event is also an option.

Figure 8 shows the number of organizations that used a specific media during the first three months after the initial shake (March to June 2011). The most often used media was organization’s website, where a little less than half of the respondents used for both collecting donations and recruiting volunteers. In case of approaches to collection donations, this

was followed by organization’s newsletters and magazines, blog, and listserv. In case of volunteer recruitment, organization’s blog, listserv, and Twitter followed.

These results reveal the tendency of nonprofit organizations to use “in-house” media, or communication channels that nonprofit organizations have within the organization to directly transmit information to the public.

Due to its immediacy in spreading information to masses, social media has attracted much attention as effective communication channels particularly in times of disaster (Sekiya, 2012; Smith, 2010). Looking at what we found in the survey, we see that about 22 to 23 percent of the organizations used Facebook and Twitter. Only one organization used LINE.

The number of organizations that were able to use mass media – televisions and newspapers – was rather limited. 20 percent of the respondents, or 22 organizations appeared in newspaper articles for the purpose of collecting donations, and 14 organizations were able to use television news. The use of mass media by was further limited in case of volunteer recruitment.



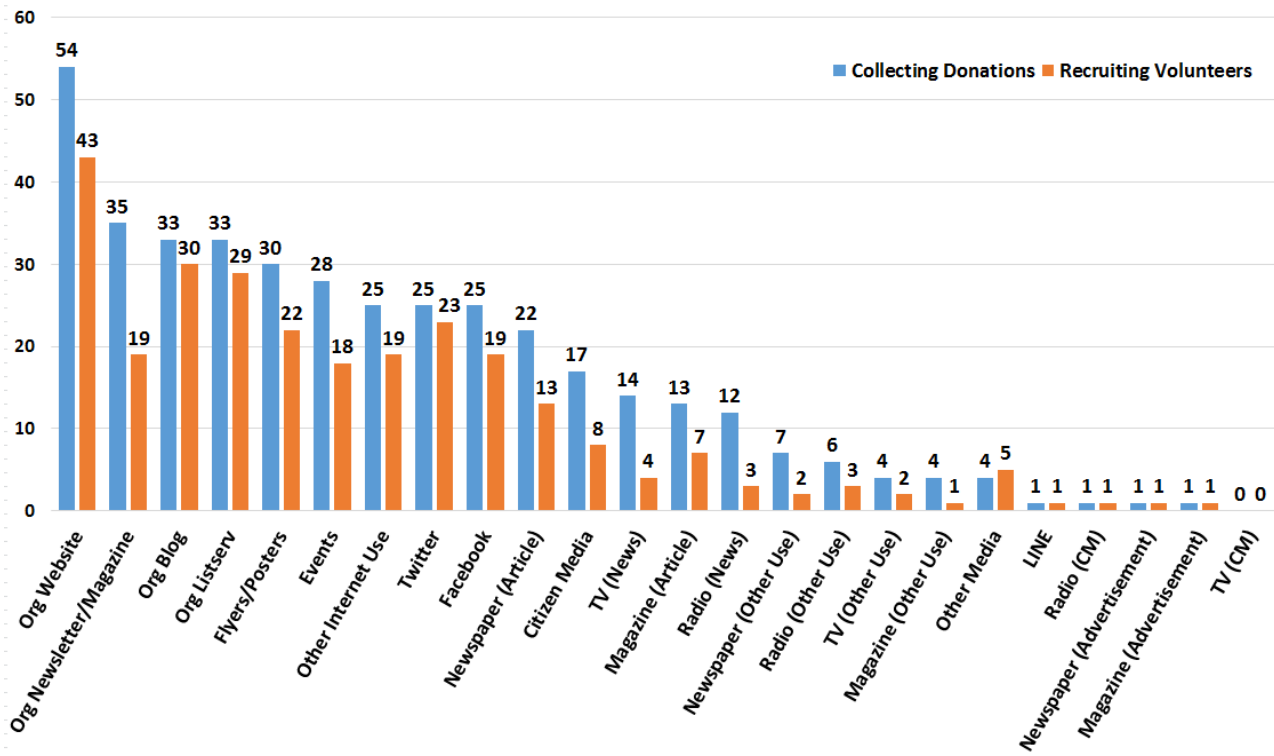


Figure 8 Use of Communication Channels During the First 3 Months (N=110 for collecting donations, N=99 for recruiting volunteers)

#### 4.1.1. Use of Communication Channels among Local Nonprofits

Focusing on 44 nonprofit organizations that have their headquarter in the three most-affected regions – Iwate, Miyagi, and Fukushima - we learn that organization’s website, blogs, and Twitter were the top three media used by multiple organizations. Use of organization’s listserv, newsletters and magazines were rather limited. We see a tendency among these local nonprofit organizations to use communication channels that approach the general public, rather than those who already have some sort of a relationship with the audience.

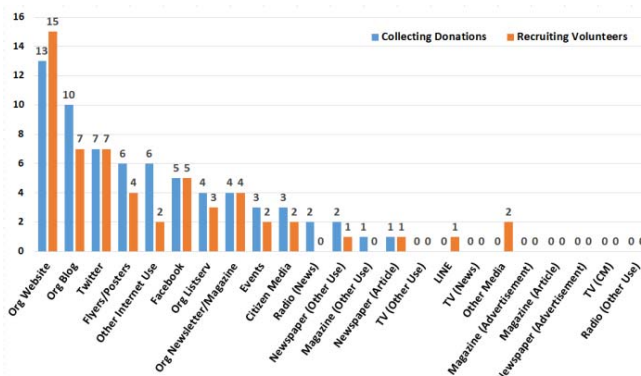


Figure 9 Use of Communication Channels by Organizations in the 3 Affected Prefectures During the First 3 Months (N=44)

#### 4.1.2. Use of Communication Channels in Newly Founded Organizations

Looking specifically at media use of 37 organizations founded after the Great East Japan Earthquake, we see a similar trend in the use of organization’s website, blogs, and Twitter. Facebook was also another communication channel used by these newly founded organizations. 13.5 percent of the organizations used Facebook to collect donations, while 18.9 percent used it to recruit volunteers.

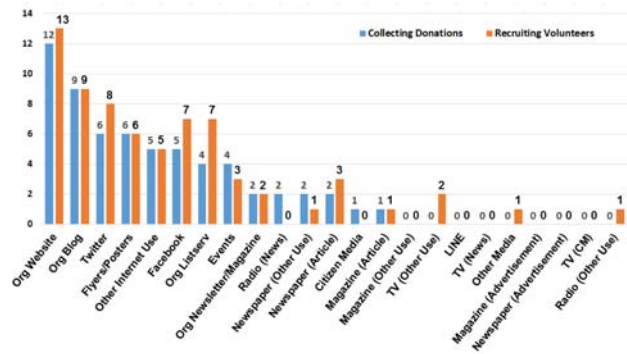


Figure 10 Use of Communication Channels by Newly Founded Organizations During the First 3 Months (N=37)

#### 4.1.3. Change in Trends of Used Communication Channels

##### Channels

How did the trends of media use change after three months? Figure 11, 12, and 13 show the number of organizations that used specific media during the second three months (between July and September 2011, until six months after the initial shake), between October 2011 to March 2012 (until a year after the disaster), and between April 2012 to March 2013 (until two years after the disaster).

Comparing these two graphs with Figure 8, we learn that more nonprofits began to organize events to collect donations and recruit volunteers. This trend is particularly observed

towards a year after the initial shake.

Furthermore, use of Facebook also increased as time passed by, to the point where it took over the other frequently used social media, Twitter. It is also interesting to note that more organizations use Facebook to recruit volunteers than to collect donations. Because Facebook places more important on providing information to those already connected to the organization via “friend” function, we can speculate that nonprofit organizations place more importance on trust relationship in recruiting volunteers than in asking for financial contributions.

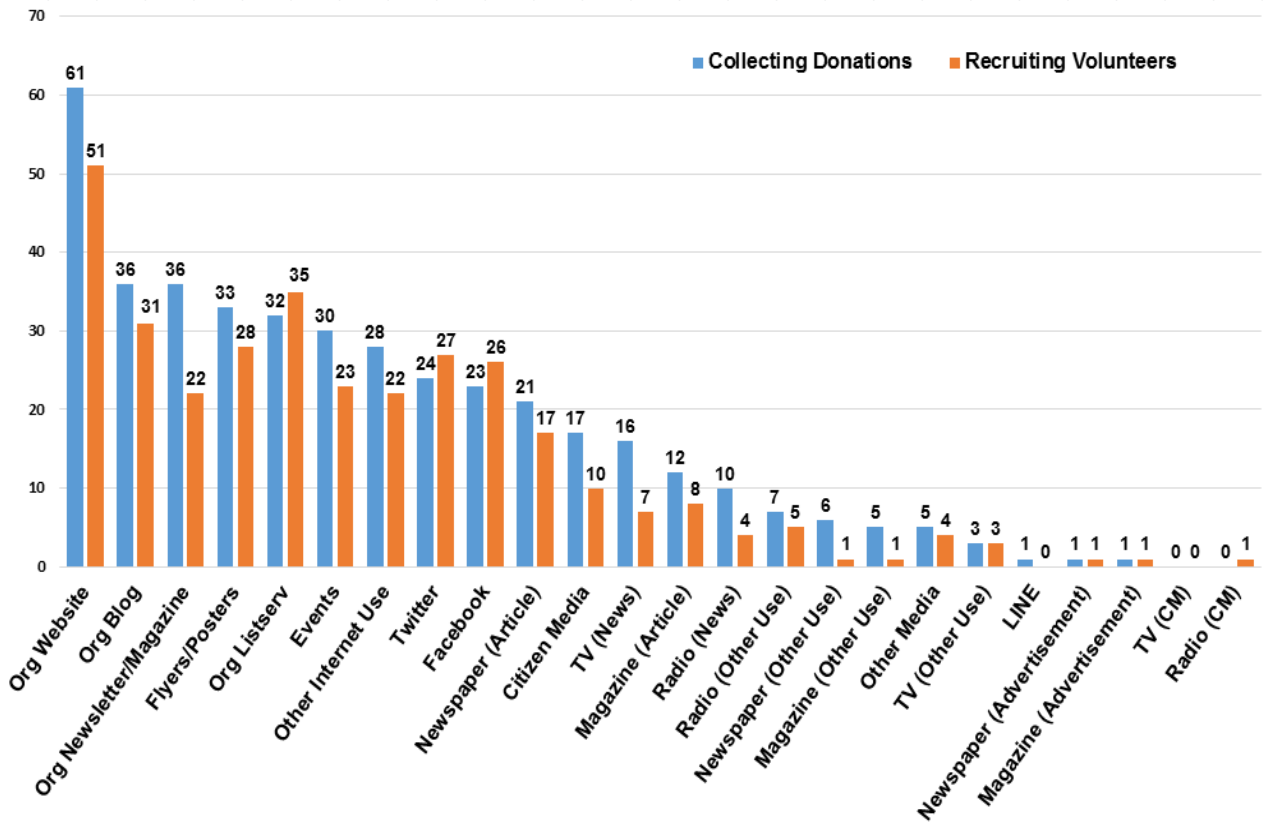


Figure 11 Use of Communication Channels Between July and September 2011  
(N=110 for collecting donations, N=99 for recruiting volunteers)

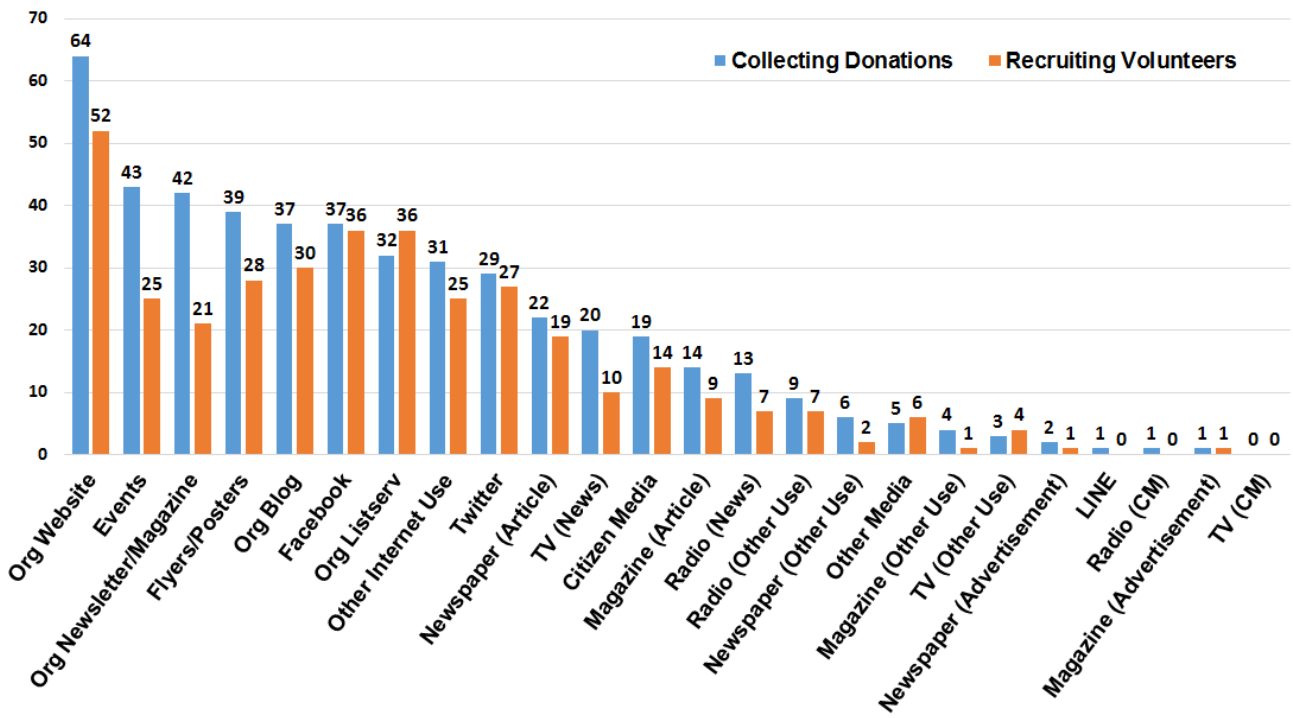


Figure 12 Use of Communication Channels Between October 2011 to March 2012  
(N=110 for collecting donations, N=99 for recruiting volunteers)

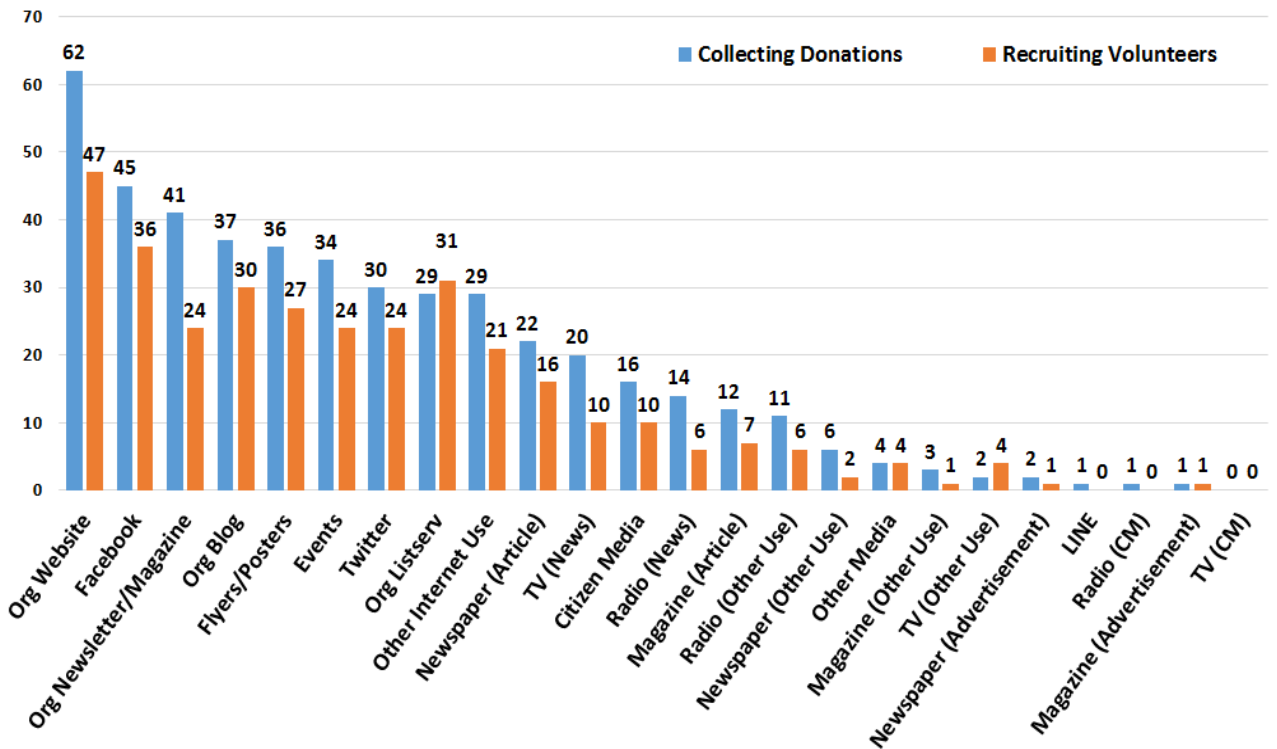


Figure 13 Use of Communication Channels Between April 2012 to March 2013  
(N=110 for collecting donations, N=99 for recruiting volunteers)

#### 4.1.4. Reasons for Choosing Communication Channels

What were the reasons for choosing specific media or communication channels in soliciting donations and recruiting volunteers? Figure 14 shows that many organizations choose communication channels that they have been using in daily operations. This is by far the main reason for choosing organization’s website, blogs, listserv, newsletter and magazines.

Low cost followed as the second reason in selection of media to use. Figure 14 further shows that nonprofit organizations choose social media (Facebook and Twitter) for its speed. While limited in number, mass media including newspapers, magazines and televisions are chosen with an expectation to reach more people.

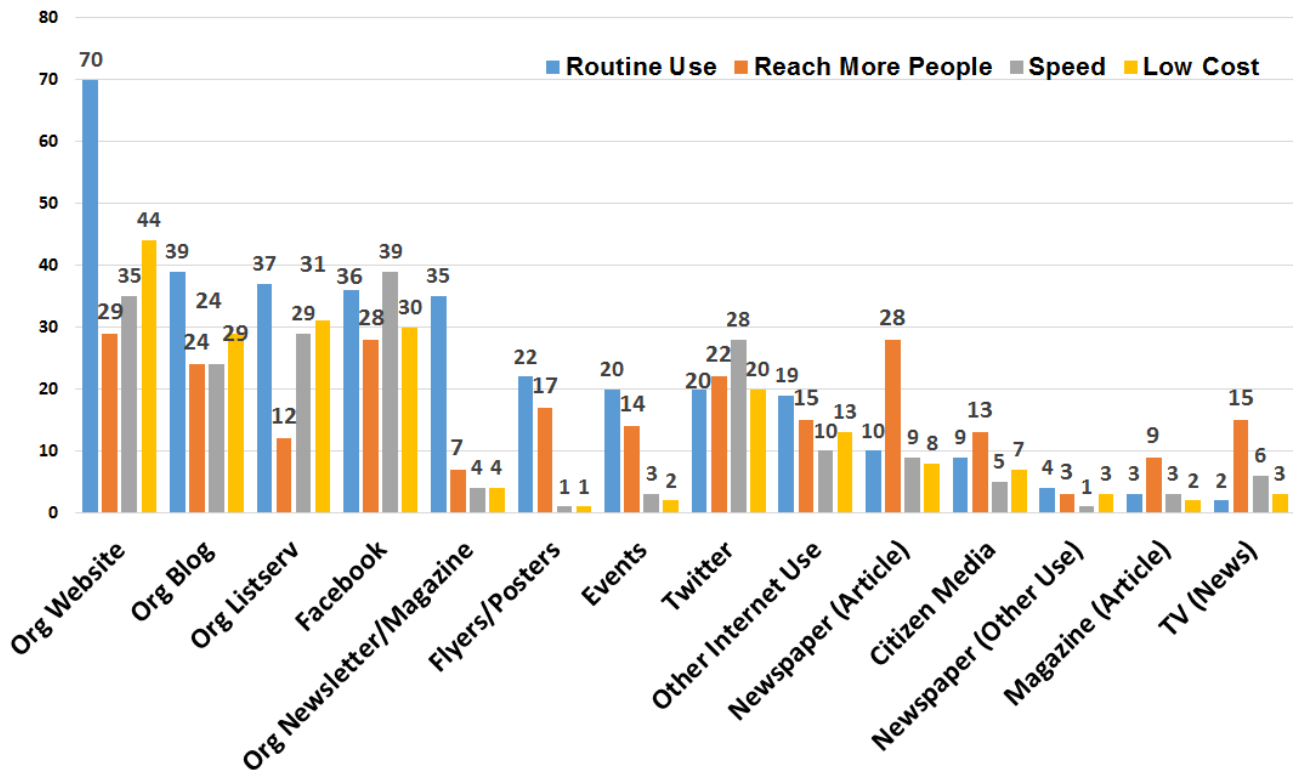


Figure 14 Reasons for Choosing Communication Channels (N=99)

#### 4.1.5. Desired Media or Communication Channels

There were two types of media that nonprofit organizations wished to use, but were unable to do so: mass media and social media. As shown in Figure 15, 32.4 percent of the organizations that responded to this question had the desire to use televisions, magazines and newspapers. This shows that nonprofit organizations are willing to reach out to broad range of audience through mass media.

Results also reveal that nonprofit organizations are seeking for a way to use LINE and Twitter. Interestingly, no nonprofits brought up Facebook in answering this question. This is an interesting finding when examined along with media used prior to the disaster (Figure 16). During the three months before the disaster, 20.9 percent of the organizations used Facebook for collecting donations, and 18.2 percent for recruiting volunteers.

The figures for Twitter were 17.3 percent and 15.2 percent, respectively. Given small difference in use of these two social media, question remain as to why more organizations found difficulty in using Twitter after the disaster.

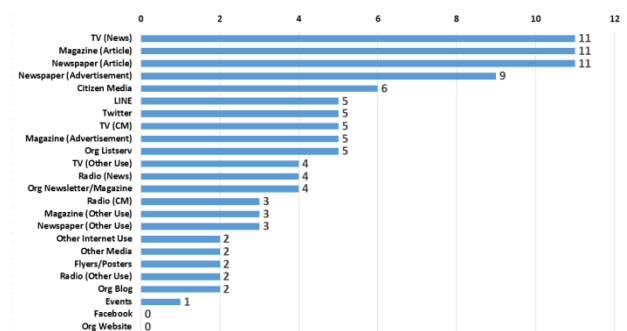


Figure 15 Media or Communication Channels that Organizations Wished to Use (N=34)

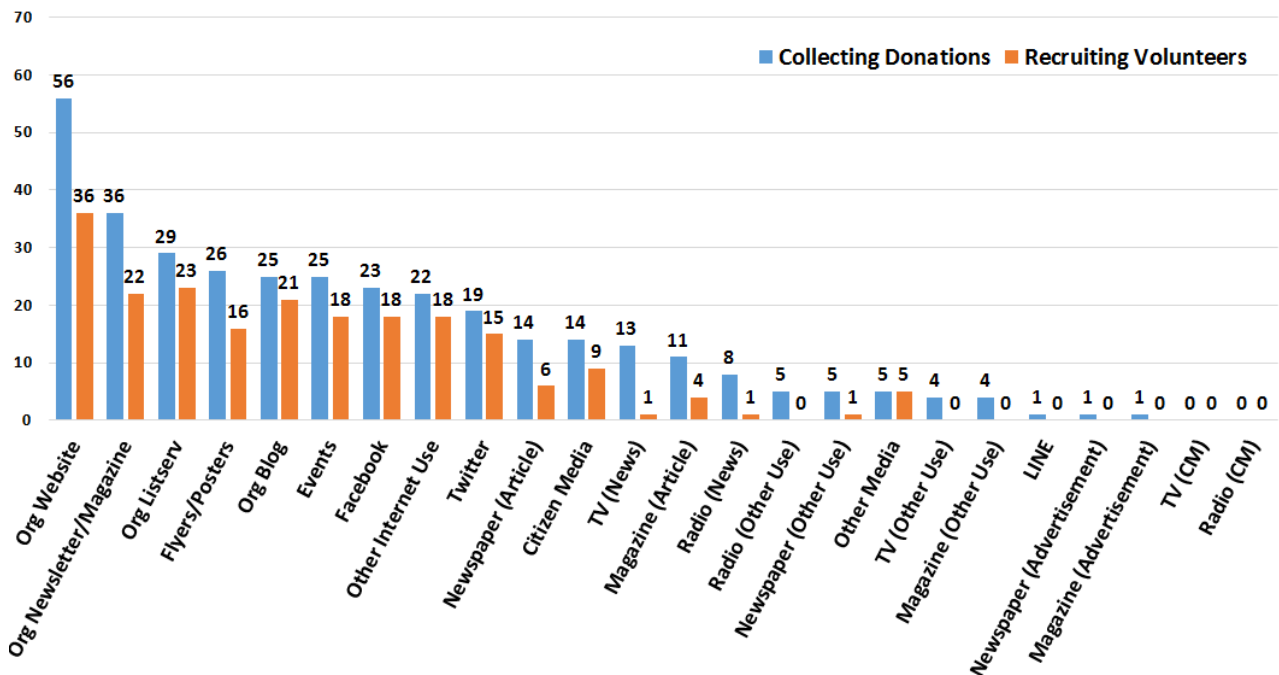


Figure 16 Use of Communication Channels During 3 Months Before the Disaster (N=110 for collecting donations, N=99 for recruiting volunteers)

#### 4-2. Frequency of Information Transmissions

Another important question to ask in thinking about the use of various kinds of media is how many times nonprofit organizations transmit information using respective media. One would assume that frequency of information transmission would differ depending on individual media's characteristics. For example, updating or posting new information through in-house media such as organization's websites, blogs, and listserv may not be as difficult as transmitting information through external media like televisions, newspapers, or magazines. Procedures to provide information may be much easier for some of the social media. Updating status in Facebook or tweeting in Twitter is quite a simple task that can be completed anywhere with a communication device and Internet access.

Indeed, survey results showed that organization's websites, blogs, listserv, other Internet use, Facebook, and Twitter were the six types of media through which nonprofits transmitted information most frequently. Figure 17 shows this finding along with how frequently nonprofits used, updated, published, posted, or hosted events during the first three months after the disaster, i.e. from March to June 2011.

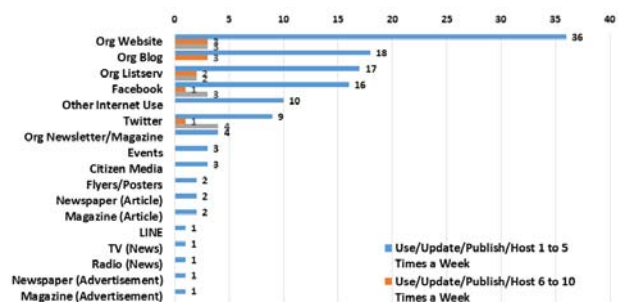


Figure 17 Frequency of Information Transmission between March and June 2011 (N=96)

It is interesting to note that in all types of media, information was transmitted one to five times a week. Taking advantage of the easiness of using social media, a limited number of organizations posted information more than eleven times a week.

How did the frequency of information transmission change over time? One would assume that interval between information provision is shorter in the early stage of relief activities. Days and weeks that follow an initial outbreak of the disaster is when waves of new information flow and situations change rapidly. Under such conditions, sharing updated information more frequently with the public may be effective in soliciting donations or volunteers. The six graphs shown as Figure 18

indicate the change in frequency of information transmission over time, from three months after the initial shake (March to June 2011), six months (July to September 2011), a year (October 2011 to March 2012), and two years (April 2012 to March 2013). Graphs reveal that in general, nonprofit organizations transmitted information more frequently after six months or a year after the disaster. For social media and blogs, the number kept on rising towards the second anniversary in 2013.

Another interesting findings from these graphs is that the trend of frequency of information transmission remained rather constant throughout the two years – organizations updated or posted information only once to five times a week, even when using Facebook and Twitter.

- Use/Update/Publish/Host 1 to 5 Times a Week
- Use/Update/Publish/Host 6 to 10 Times a Week
- Use/Update/Publish/Host More Than 11 Times a Week

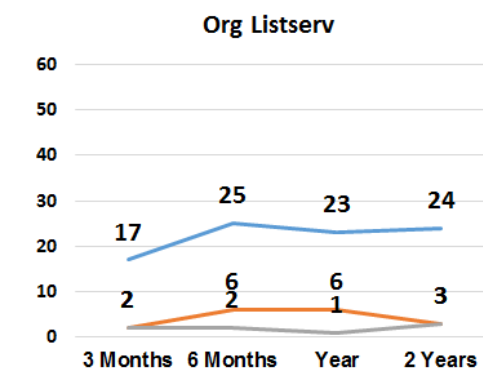
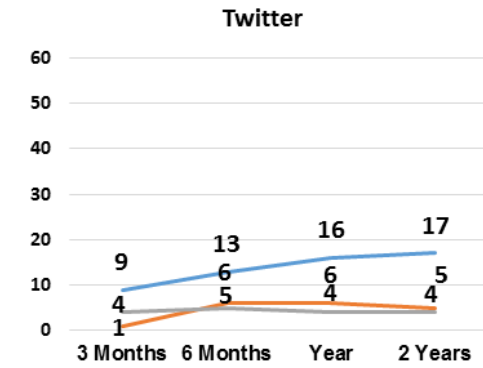
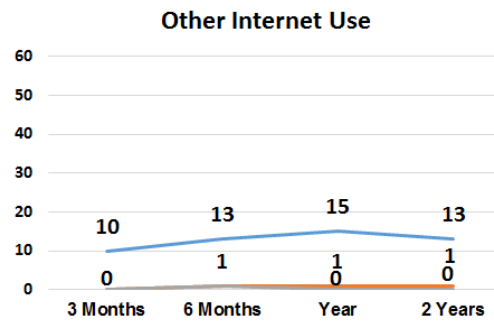
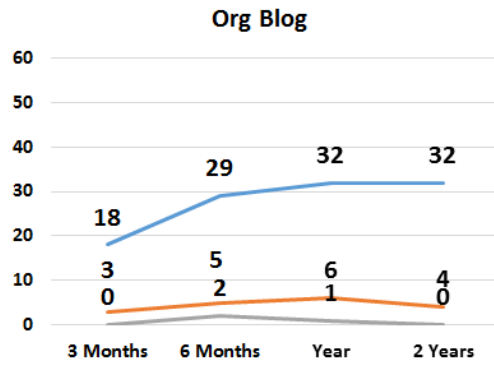
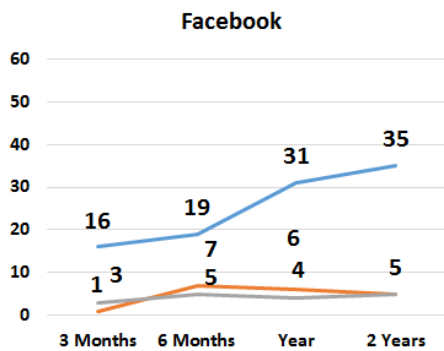
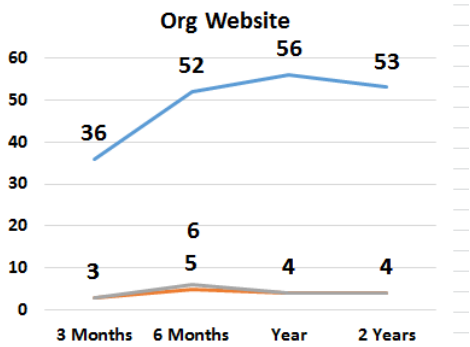


Figure 18 Frequency of Information Transmission in Six Media (N=96)

### 4.3. Points to Emphasize

Using these different types of communication channels, what kinds of information do nonprofit organizations intend to emphasize in order to mobilize the audience to take voluntary actions? Figure 19 shows points in which nonprofits placed importance in information they presented. In the survey, we pre-established five points for nonprofit to choose from, and asked to rank them.

Findings reveal that nonprofit organizations place importance on clearly showing the need for support. This was followed by presenting information that's easy to understand. Interestingly, nonprofit organizations were also careful to present themselves as trustworthy organizations. Less emphasized was a presentation of emotional appeals using tragic photos and/or stories, as well as use of specific statistics or data.

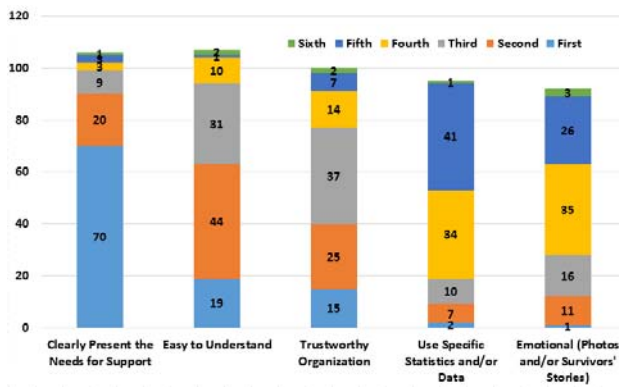


Figure 19 Points to Emphasize in Presented Information (N=78)

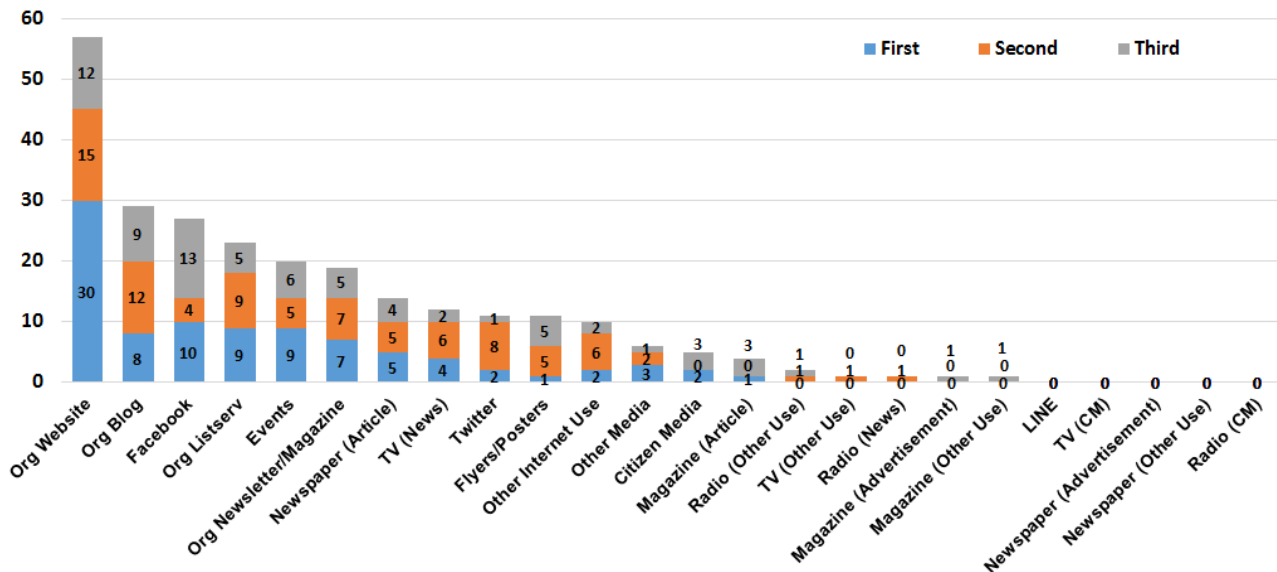


Figure 20 Communication Channels Perceived Effective in Collecting Donations (N=87)

### 4.4. Perceived Effectiveness

Given the types of media used as well as frequency of information transmission, the next question becomes whether they were effective in mobilizing the public towards voluntary actions. Studies on communication campaigns have long argued the difficulty of conducting evaluations (Atkins and Freimuth, 2013; Valente and Kwan, 2013). Provided information indeed is considered to be an important factor that contributed to leading one to make financial contributions or to volunteer; however, there are countless number of other contributing factors that examining the exact effect of communicative approaches is difficult. Understanding valid effectiveness of information transmission thus requires careful design in collecting data, which goes beyond the scope of this paper.

However, it is possible to seek how nonprofit organizations perceived the effect of their information transmission. Figure 20 shows the types of media that nonprofit perceived as effective in collecting donations, and Figure 21 shows the same but in the context of recruiting volunteers. We asked the responding organizations to choose three media that they found most effective in mobilizing the public towards voluntary actions, and to rank them from first to third.



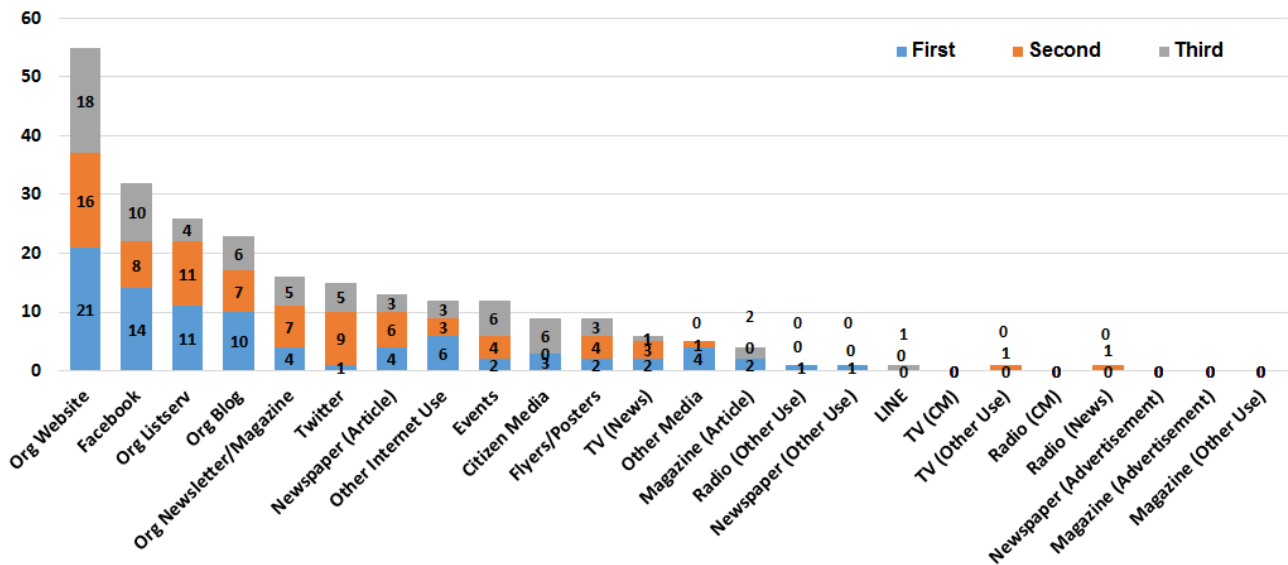


Figure 21 Communication Channels Perceived Effective in Recruiting Volunteers (N=86)

We find that majority of the organizations found organization’s website effective. 66.5 percent found it useful in collecting donations, and 64.0 percent found websites effective for volunteer recruitment. Other in-house media including organization’s blogs, listserv, newspapers and magazines were also perceived effective by nonprofit organizations. Facebook was also perceived as an effective tool for mobilizing people towards voluntary actions. This is an interesting finding when compared to perceived effectiveness of Twitter. Among mass media, perceived effectiveness of articles in newspapers were perceived most effective by nonprofit organizations.

## 5. Discussions

Marketing and public relations are indeed important tasks for nonprofit organizations in normal times. However, the importance increases sharply in time of disasters, when organizations face financial and labor needs in a short period of time. In such times, motivation to take voluntary actions also rapidly rise among the public. There is no reason for nonprofit organizations to take leverage of such situation. To extract lessons learned from the Great East Japan Earthquake that can well be utilized in future disasters, I discuss four aspects that emerge from the findings in our survey.

### 5.1. Target Audience

Findings from used media show that nonprofit organizations had two sets of audience in soliciting voluntary actions in the aftermath of the Great East Japan Earthquake: general public,

and those already connected to the organization. While information provided through organization’s website, blog, posters and flyers, as well as Twitter reach wider range of audience, several nonprofit organizations used organization’s newsletters and magazines, and organization’s listserv, which mainly target the people with some sort of connections with the organization. These people may include members of the organizations, those who made financial contributions or volunteered with the organization before, and people who simply contacted the nonprofit to seek for informational packet in the past. Facebook may also be open to the general public, but it is more likely to reach those who are “friends” of the organization.

Looking at the perceived effectiveness of these media, we found that nonprofit organizations did receive positive response from both types of audiences. Further analyses in examining which information source proved effective would reveal which of the two types of audience nonprofit organizations should target in case of a disaster in the future.

### 5.2. Use of Social Media

The Great East Japan Earthquake of 2011 was the first large-scale disaster after social media had become popular among the public in Japan. According to a report by the Ministry of Internal Affairs and Communication (2013), 57.1 percent of the people in Japan today use some sort of social media. Social media is also no longer a tool for young generations only; more than half of the people in their 30s and 40s also use LINE, Google Plus, Facebook, Twitter and other



kinds of social media.

Our survey revealed that there were only about 20 to 23 percent of organizations that used Facebook and/or Twitter in the aftermath of the disaster. Given that 26.1 percent of the people use Facebook and 17.5 percent use Twitter (Ministry of Internal Affairs and Communication, 2013), nonprofit usage of these social media may not be surprising. However, considering the advantage that these social media may have in early stage of relief activities when situations develop and constantly change, we see that their usage was rather limited. In fact, one nonprofit practitioner shared with us the experience of intentionally *not* using these social media to solicit voluntary actions<sup>5</sup>. Nonprofits indeed realized the possibility of reaching wider range of people through Facebook and Twitter, but they also realized that they do not have the capacity to respond to the expected surge of responses. If nonprofits are to leverage the advantage of social media in future disasters, they must invest in their ability to adapt and prepare the organization to respond to what sometimes may be an overwhelming reactions.

### 5.3. From In-House Communication Channels to Mediated Crisis Model

Findings from the frequently used communication channels showed that nonprofit organizations had the tendency to use in-house media or communication tools that nonprofits had access to within the organization to directly reach the audience. Were nonprofit organizations in Japan able to use communication channels that exist outside the organizations to amplify the effect through “mediated crisis model” advocated by Waters and Tindal (2011)? In other words, were they able to reach the public via use of mass media, and make effective use of linking multiple types of media?

Because only a limited number of organizations were able to use mass media to provide information about opportunities for voluntary action, we assume that nonprofits were unable to implement strategies to effectively link multiple media in mobilizing the public.

Although the survey did not ask questions about specific communication and media strategies that nonprofits may have had, semi-structured interviews conducted by Okada to eleven nonprofit organizations working in the field of international development support this point. In the interviews, nonprofit practitioners discussed their concerns about lack of clear

communication strategies (Okada, 2013). Most organizations worked with *ad hoc* strategies, taking in whatever media opportunity that popped out, given limited amount of time and human resource to develop a well-thought plan.

However, some organizations were able to utilize their experience of the Great Hanshin-Awaji Earthquake of 1995, leading them to realize what was to be done in terms of information provision. Lesson learned from the experience of the Great East Japan Earthquake should thus be recorded and shared among nonprofit practitioners to better prepare for disasters in the future.

## 6. Conclusion and Future Research Questions

When a disaster strikes, we often observe a rise of those willing to help others in need. In this paper, we presented nonprofit organizations as agents that provide these people an actual opportunity to take voluntary actions through transmission of information. Findings presented in this paper leads to several questions for future research questions that would lead us to draw more concrete lessons for disasters in the future.

First, further analyses should be pursued about media use by nonprofits in disaster-affected regions. Some of the respondents of our survey were very keen on this point, emphasizing the need to understand the difference between those that operated in chaos and those who were based in more calm regions. Because this paper focused on presenting findings that capture a broad picture of the nonprofit sector in Japan, our analyses of these local organizations were limited. What types of information transmission did these local organizations perceive effective? What media did they desire to use, and what were they actually able to use? How large were the differences? We plan to elaborate these questions in another discussion paper.

Second, focused analyses should also be conducted on organizations founded after the disaster. Again, we presented a limited examination of their media use in this paper. However, given the unique conditions under which these new organizations operate, detailed analyses is worthwhile.

Third, further studies should be conducted on evaluation, i.e. to understand what went well and what didn't. In this paper, we examined media use that nonprofit organizations perceived as effective. There is a need to elaborate an evaluation design that best captures that the types of information provision that contributed in mobilizing the public towards taking voluntary

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<sup>5</sup>From a discussion at the NPO Research Forum organized by Japan NPO Research Association (JANPORA) at Osaka University on April 20, 2014.

actions in times of disaster.

Finally, further examination of the nature of information presented by our target nonprofit organizations as well as how the decisions were made with regard to communication strategies would lead us to extract key lessons for nonprofit organizations in future disasters. Studies analyzing *what* was presented in the websites, blogs, Facebook, Twitter, as well as case studies of specific organization may merit attention.

Natural disasters, in particular, are something that human beings cannot avoid. Yet, what emerges in such chaotic situation is “A Paradise in Hell,” where people are more willing to help those in need. Nonprofit organizations in Japan should realize the key role they play in providing these motivated people actual opportunities to take voluntary actions through provision of information. An ideal way to do so can only be extracted from lessons learned in past disasters. What is needed is an effort to record and accumulate the experience of information transmission by nonprofit organizations in response to the Great East Japan Earthquake, and we believe that this study has taken a firm first step.

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