

# Sectoral coordination in humanitarian information management: The implications of professionalization

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## ABSTRACT

Sector wide collaboration in humanitarian information management will occur in a context defined by professionalization of information management more generally as well as evolving needs for data within the humanitarian relief sector. By accounting for these broader trends this research contributes to our understanding of collaboration in the humanitarian relief sector. In particular, the research analyzes the desire for greater standardization within the sector as a function of both the process of professionalization for information management as well as greater specialization in information technology that is a response to technological change. Based on these insights, recommendations for future actions for the community are made.

## Keywords

Inter-organizational coordination, humanitarian information management, professionalization

## INTRODUCTION

Information and communication technologies have enabled humanitarian organizations to collect, store, analyze and distribute increasing volumes of information that are critical to an effective and efficient response. However, while technical capacities create the possibility of widespread and free flowing information, further technical issues together with organizational challenges limit this potential. While organizational issues challenge humanitarian information systems implementations, they are likely to create a greater challenge for humanitarian information management (Maitland et al 2009). Unlike standard information technology issues, for which responsibilities clearly lie with the 'IT Department,' which can be readily identified on an organization chart, issues of information management typically span many departments. And although the IT department is likely to be one of them, solutions often require IT staff to work intensely with the humanitarian programs that collect, analyze and use the information, such as health, housing, water, and sanitation. Often, neither the IT department nor the programs have the specialized skills required to manage the volume, complexity and sensitivity of these data. This can result in information management problems within as well as between organizations that need to share information to provide efficient and effective humanitarian relief.

Hence, humanitarian information management may be viewed as a shared problem that is best addressed through collaborative efforts at the sector level. Previous research on humanitarian coordination bodies has shown that these bodies struggle to help members overcome the challenges of community-wide coordination. However, previous analyses fail to explicitly incorporate broader trends in both the humanitarian and

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information management fields, and thereby fail to identify their implications for these coordination bodies.

This research seeks to fill this gap and in particular seeks to answer the following questions: How well and through which mechanisms can a community-level effort focused specifically on humanitarian information management help overcome collaboration barriers? What are these barriers? How are the challenges of humanitarian information management related to the need for professionalization and other sectoral trends in the broader humanitarian (information management) sector? What further can be done to improve humanitarian information management collaboration sector-wide?

These questions are analyzed through a case study of a coordination body that seeks to facilitate sector-wide collaboration in humanitarian information management. Data for the case were collected through interviews with and surveys of participants from GlobalSympoNet,<sup>1</sup> also referred to as ‘the symposium,’ a community that first met in 2002, with a second meeting in 2007, and that held interim meetings at regional hubs.

The paper is organized as follows. First, we situate the challenges of humanitarian information management in the broader context of sectoral trends and occupational trends in information management in general. The issues are then integrated with extant literature on humanitarian coordination, and in particular coordination bodies. Next we provide the case data including the background of GlobalSympoNet as well as survey results that provide insight into the needs of and challenges faced by symposium members. This is followed by an analysis of the symposium in light of recognized needs of the professionalization process. Finally, the research concludes with recommendations for the humanitarian relief sector, including recommendations related to project networks, advice networks and further professionalization of humanitarian information management.

## HUMANITARIAN INFORMATION MANAGEMENT

In addition to the potential created by advanced information and communication technologies, the challenges of collaborative information management are influenced by sector-wide trends in information gathering and analysis as well as in the status of humanitarian information management work and workers.

### Sector Organization and Accountability

The international humanitarian aid sector consists of a wide range of agencies with varying sizes, missions and areas of operations, including UN agencies, non-governmental organizations (NGOs) and governmental agencies, among others. Among the NGOs, there are large, multi-continental agencies that typically have their headquarters in so-called western (and northern) countries from which large numbers of country or field offices are supported. Complementing this contingent of large western-based NGOs, are large numbers of regional, national and local NGOs located in countries that frequently need assistance, typically in the ‘south’ (Poelhekke 1999).

The revenues of the large NGOs are generated from a variety of sources, including charitable contributions from individuals and firms, as well as through contracts and grants from government and non-governmental organizations. In many cases, a large portion of these revenues come from western government development agencies (Edwards and Hulme 1996). The typically smaller, national/local NGOs generate revenues in much the same way but their grants and contracts are with local governments and they may also obtain sub-contracts with the international NGOs. These subcontracts are awarded either on an ad hoc basis to fill in skills or geographical coverage gaps or on a longer term basis as implementation partners, and represent a significant channel for aid flowing from north to south.<sup>2</sup>

This structure, particularly as reflected in the sources of revenues and relations between NGOs, has several implications for field-based data collection initiatives. The international NGO’s role as a recipient of a government contract or grant and local NGOs as sub-contractors on these projects indicate the source and structure of data requirements. In particular, the requirements are often defined by monitoring and evaluation programs, fulfilling the need for accountability, which has received increased attention in the last decade (Brown and Moore 2001; Ebrahim 2003; Gray et al. 2006). This attention has arisen due to several factors, including high-profile scandals, greater reliance on NGOs by governments as part of the broader trend of

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<sup>1</sup> Throughout this paper this pseudonym is used to protect the confidentiality of the organizations.

<sup>2</sup> While adequate for our purposes here, this description of the sector provides only a general overview of the sector and fails to capture the complexities as well as the dynamic nature of these roles and relations (see e.g. Edwards, Hulme and Wallace 1999; Poelhekke 1999).

liberalism, and increased emphasis on accountability across all sectors of private firms, governments and NGOs (Gibelman and Gelman 2004; Edwards and Hulme 1996).

This emphasis on accountability is in some cases resulting in innovative uses of information and communication technologies in the field. As mobile devices, together with bar-coded picture-bearing identification cards, help NGOs' control distribution of goods and services, preventing double dipping by beneficiaries and thereby enhancing the NGOs' accountability, they also open new channels for information flows up and down the organizational hierarchy (Tapia and Maitland 2009).

While accountability provides incentives for expanded data collection and sharing of data across organizational levels within an organization, it is unclear how it affects inter-organizational collaboration. It is likely, however, that given an organization's need for control of information, particularly if it serves as a basis for evaluation or has implications for an ongoing relationship with a donor, that accountability would create a challenge to greater levels of inter-organizational information sharing.

### **Professionalization and Humanitarian Information Management**

As the prominence of the role of NGOs in development and disaster relief has grown so has attention to their management (Lewis 2001). Further it is argued that while the management of NGOs requires some skills that are common among non-profit and even for-profit organizations (Beck et al, 2008), NGOs do face some unique contexts and play unique roles that may generate unique managerial requirements (Lewis 2001).

Information management is one such managerial function, with challenges created by its process of professionalization. Professionalization is the process by which an occupation becomes a profession, or field that requires extensive study and a mastery of specialized knowledge, such as medical, religious, legal and engineering fields (Denning, 2001; MacDonald 1995). Professions have a mastery over a skill or vocation, they require advanced learning usually represented by higher education credentials, possess high-level intellectual skills, and have independence and discretion in the working context (Middlehurst and Kennie 1997).

The process of professionalization can be divided into four phases (Tseng 1992). In the first two phases, labeled 'market disorder' and 'consolidation of the profession,' the occupation transitions from a stage in which entry is open, there are few incentives for specialized training, and programs offering specialized training vary in their curricula and the qualification of graduates and instructors, to one in which practitioners' aspirations develop a degree of consensus, training institutions improve the quality of their offerings, and professional associations emerge to raise prestige and formulate ethical standards (Mikelson, 1996: Tseng, 1992).

In phase three, control of admission to the profession begins, often through expansion of the importance and control of professional associations, including possibly accreditation of practitioners. In the fourth and final phase, the profession, often through its now powerful professional organizations, develops into a public profession, engaging in publicity campaigns and potentially achieving legislative recognition and licensure (Mikelson, 1996: Tseng, 1992).

While the humanitarian information management community is unlikely to seek public profession status, it does aim to clarify the nature of its work and have a more easily recognizable and consistent location in the organizational hierarchy. As such it is likely between the first and second phases in the process of professionalization. This can be compared with the status of information technology, which is in latter part of stage two (Tapia 2007). For example, information technology programs exist in wide range of educational institutions and professional certifications, made available through technology vendors such as Cisco and Microsoft, are widely available and accepted as conditions for employment. While programs in information management can be found, they are less common and hence, comparatively, information management and its sub-discipline of humanitarian information management, are less professionalized.

It is important to note, however, that not all changes in the nature of work in an occupation signal professionalization. For example, while changes in the nature of work in political communication are widely regarded as 'professionalization,' Negrine and Lilleker (2002) argue that real professionalization is unlikely to have occurred and that instead the change in the process of political communication was simply an increased level of specialization that resulted from advances in information and communication technologies.

### **Inter-organizational Coordination among Humanitarian Organizations**

The need for greater coordination in the use of IT in humanitarian response and of humanitarian information management (IM), has led to the emergence of coordination bodies. Research on three of these bodies, of which this research is a part, has found that IT/IM humanitarian relief coordination bodies differ on a variety of

dimensions including funding mechanisms, autonomy, and number of members. These differences are likely to have implications for the strategies they employ. However, despite these differences, their members report a fairly uniform set of challenges to be overcome, namely a lack of standardization, capacity, and information availability and analysis (Saab et al 2008). In a more in-depth study of the effectiveness of one body for overcoming coordination barriers, Ngmassi et al. 2009 found that despite positive attitudes toward coordination by members, seven of eight widely accepted barriers still exist. In particular, the research found that whereas mandate-oriented barriers were most significant, structural factors were found in the greatest numbers. These findings suggest that effective humanitarian NGO coordination bodies must pay attention to both organizational design and management issues, although the former are likely to have a greater impact on coordination.

Given the integrated relationship of information technology and information management, in many cases coordination bodies target both simultaneously. In the context of the differences in levels of professionalization discussed above, together with the ease of identifying IT personnel as compared to information management personnel within an organizational hierarchy, coordination in the latter can present greater challenges and require more significant organizational changes (Maitland et al. 2009). These findings support those of Ngamassi et al (2009) that focus on the need for organizational changes by the members as a pre-requisite for effective coordination in either IT or IM.

Hence, challenges of coordination in humanitarian information management occur in a context in which greater needs for accountability are generating increases in data collection and analysis, together with trends in greater attention to management capacity of NGOs, including increasing professionalization in humanitarian information management. Also coordination in humanitarian information management is coupled with the need for greater coordination in both the IT and IM functions of humanitarian organizations. These trends will likely influence the extent to which coordination bodies, in this case the GloballySympoNet, can help its members overcome challenges to coordination. Accordingly, this research seeks to answer the following questions: How well and through which mechanisms can a community-level effort help overcome collaboration barriers? What are these barriers? What further can be done to improve humanitarian information management sector-wide? How are the challenges of humanitarian information management related to changes in the broader humanitarian (information management) sector?

## THE CASE OF THE GLOBALSYMPONET

The GloballySympoNet is a community of humanitarian and related organizations concerned with information management. With roughly 300 members from roughly 100 organizations, the community consists of diverse organizations, including UN agencies, NGOs, private sector, governmental organization, the media and academics, among others. The GloballySympoNet held a series of conferences and workshops, organized by a UN organization, designed to address issues of humanitarian information management (HIM). The series, began in 2002 as a meeting of humanitarian information management professionals and was followed by a series of regional meetings intended to bring the principles and best practices to a wider range of humanitarian organizations and in particular bring together practitioners in the field, as opposed to only headquarters staff. The second meeting of GloballySympoNet, was held in October 2007 and included three days of working group meetings, designed to update the principles and best practices and identify an agenda for further development of HIM. In the following we describe these meetings in greater detail and present data on perceptions of attendees.

As described in Saab et al. (2008) the GloballySympoNet differs from other coordination bodies in its autonomy, funding and number of members. The community has comparatively less autonomy as its UN sponsor's efforts are mitigated by the need for organizational approval as well as by the requirement to balance the community's needs with many competing interests within the organization. However, while the community has to compete for priority it is relieved of the burden of funding. Similarly, without a significant concern for funds, the community can include or attract a much larger number of members than other organizations for which members might have to pay dues. It is also important to note that the community includes managers from both headquarters and the field. This is different from the other two coordination bodies in which the initial focus was exclusively on headquarters coordination, while one subsequently sought to replicate those structures in the field (see Saab et al 2008).

This case was developed through multiple data collection efforts. The first, which occurred in the early fall of 2007, was for assessments of the 2002 symposium and regional workshops. Data were collected through six interviews and roughly 50 survey responses from past symposium and workshop participants, although the response rate for the survey was low. The second round of data collection occurred during the 2007 symposium, in which data were collected through interviews, observations and a survey. The third round included a follow up survey, carried out in the spring of 2008.

Given the evolution of the community, in the following two sections we provide reflections on the 2002 symposium and regional workshops, followed by results of the assessment of the second symposium.

### **The 2002 GloballySympoNet and Regional Workshops**

According to participants, the 2002 GloballySympoNet was the first meeting of its kind and occurred in the early stages of attention to information management and sectoral coordination. As such there were many observations on its groundbreaking nature, as an effort to gather so many Humanitarian Information Management Professionals in one place. For example, one respondent reflected,

“I still have that folder from the [2002] Symposium and I decided to move [deleted for confidentiality] with that folder, which is kind of surprising. When I threw everything else away ... I selected to take this with me, because it somehow had an impact on me. I am definitely one of your candidates for success. These types of coming together, not only do they establish contacts and create relationships between people and therefore organizations, they also change your mindset in terms of how you can approach the work that you are trying to achieve.”

In several instances when discussing the first GloballySympoNet the issue of professionalization arose. Several subjects mentioned the role the 2002 Symposium may have played in raising the standards for information professionals in the sector. One participant stated, “I think our main goal was to really sort of recognize that we were in the community, trying to increase the professionalism of that community, to get better practices with respect to information management, and the exchange, particularly around the need of standards.”

Another subject echoed this statement and said,

“After having these regional meetings, on a nearly annual basis, we have brought together partners to come to these conferences and develop the concept of community of practice... What I found in the early days was the challenge of getting the person with the right combination of humanitarian skills and information management skills, the big challenge that we had in the early days is we could find information management people, we could find IT people, we could find GIS people, but they did not necessarily have that humanitarian background. We also found a lot of humanitarians who were interested in GIS, and IM, and IT, and all of those things, also communications technologies and saw the value of potential so they adopted and learned a lot of these skills. Some of them have kind of pulled over their professional focus into information management. Somehow in this process we have had everything from information enter training, as well as these conferences, where we have actually increased our capacity, in terms of staff, who have those skills, as well as I think we have also increased, the visibility of the need of people with those kinds of skills. I have also seen a growth of people that have the combination of both the IM and the humanitarian skills over the last five years. It is much more commonly discussed and referred to if there is a further understanding of what information management means. In the past a lot of people thought of it as just an IT thing, they are starting to understand it in a broader sense as a process.”

As concerns the significance and outcomes of the 2002 symposium, most of the subjects suggested that the 10 Principles and the List of Best Practices, the textual products of the 2002 symposium, were useful to them in some way. Four out of the six subjects stated that they had used the final report, the principles or the best practices in some way during the past 5 years. One subject stated, [In reference to the Final Report] “Well apart from reading it, I use it regularly all the time, I took language from it... Everything from writing proposals to designing information systems.”

Another participant made similar claims stating, “It [the 2002 Final Report] is referred to all the time, and the statement and the operating principles, are actually referred to all the time, when describing a best practice with respect to information and information management and exchange. The document is plagiarized widely, which completely thrilled me.”

Another interviewee stated, “Where I have seen them [the principles and best practices] be used is certainly in [redacted] information management training. In all of the training and management information stuff, at some stage in the training the principles will be brought up on the screen and explained to the people as the principles that should guide our work.”

One of the subjects stated that she had shared the document with other people in the sector. She said, “I gave her the document and told her to use it as an example, what is the theme of today, what is information like, issues about how has information developed, who are the users, it is sort of a script and a little bit of structure.”

The survey respondents support this finding with 60% having made use of the language from the report. The ways in which the language was used varied, while the most popular were “to defend an action or choice”, “for writing a document for the home organization”, and “creating a new project.”

### **The 2007 GlobalySympoNet**

The 2007 GlobalySympoNet brought the community together once again for three days of working group meetings followed by a two day symposium. Data was collected via observation, interviews and surveys both at the symposium and in a six-month follow up. The findings below are primarily results of the follow up survey, which received 76 total responses (~25% response rate) from forty-seven (47) different agencies/organizations. While thirty-two percent (32%) are employees of the UN, sixty-eight percent (68%) are employed by non-UN organizations. Also, fifty two percent (52%) are either field, sub-regional, or regional workers, while most (48%) work at headquarters.

According to the respondents, the main benefit of the Symposium was strengthening relationships between agencies/organizations, with sharing of expertise identified as the second most important outcome. Following the Symposium, the majority of respondents (about 93%) had either (i) shared Symposium materials, (ii) referenced Symposium language or (iii) initiated a new collaboration activity. The number of participants that initiated new collaborative projects after the Symposium is near twice the number of participants that did not engage in any collaboration. There is nevertheless no evidence that the symposium was the trigger of those collaborative initiatives.

As strengthening relationships was seen as the main benefit of the symposium, it is interesting to see to what extent, 6 months later, the level of interaction has been maintained. The survey results indicate that since the Symposium more than ninety five percent (95%) of respondents have interacted with other participants at least once, while over fifty percent (50%) do so at least monthly. For nearly forty-five percent (45%) these interactions occurred with five or more participants.

The three days of workshops that preceded the Symposium were designed to allow a smaller group, invited by the UN, to come together to define priorities in a number of areas, which were then reported out to the larger audience at the two day symposium. Among the survey respondents, almost half reported they were not a member of any working group, and of these almost 80% expressed a desire to be. Of those who had, a little over 50% had engaged in follow up activities including sending emails and posting on forums.

In general, among both workshop participants and non-participants, the primary goal of follow-up interactions was to pursue collaboration on multi-agency/organization projects. And indeed, when asked about general attitudes toward collaboration in their home organizations, over 50% indicated that 75% or more of their humanitarian information management projects are done collaboratively with other organizations.

Hence, overall members are predisposed toward collaboration. Next we sought to understand the factors that both facilitate and hinder collaboration. Survey respondents indicated that the most significant barrier to coordination is governance, and in particular a lack of incentives and sector-wide leadership. In fact, at the Symposium itself respondents were asked which organizations they see as leaders in the Humanitarian Information Management field. While the UN host organization received the single largest percentage of nominations, 33%, there were many other organizations nominated, but also several respondents who answered ‘none.’ These results lend credence to the finding that collaboration is hindered by the lack of leadership. We were also interested in what facilitated collaboration. In the follow up survey respondents indicated that the most significant facilitators of collaborative projects are shared goals, together with the more operationally oriented motivations of a partner’s operational assets, including data and tools.

### **ANALYSIS**

In order to understand the feasibility of sector-wide efforts to overcome humanitarian information management challenges, we analyze the case data according to the research questions: How well and through which mechanisms can a community-level effort help overcome collaboration barriers? What are these barriers? How are the challenges of humanitarian information management related to changes in the broader humanitarian (information management) sector? What further can be done to improve humanitarian information management sector-wide?

### **Sector-wide Collaboration**

The case of the GloballySympoNet provides another example in which a coordination body struggles to help its members overcome collaboration challenges. For example, while the community indicated that the biggest challenge to general collaboration is governance, including a lack of leadership, the most significant outcomes of the Symposium is strengthening relationships and sharing expertise. Hence, while the symposium provides benefits they are not necessarily the benefits needed to generate widespread collaboration through establishment of standards. Instead, it appears to facilitate collaboration among sub-sets of members.

Hence, similar to findings of a study of two comparable coordination bodies (see Saab et al 2008), the findings here also suggest that projects are likely to be an important mechanisms for fostering sector-wide collaboration. In the absence of larger-scale efforts, projects among sub-sets of community members help to define common processes and procedures that can potentially develop into de facto community standards. Indeed, as the community members identified common goals as the most important incentive for collaborative projects, it follows that the existence of collaborative projects implies some degree of overlapping goals exist.

It is also important to note that the respondents also equated governance not only with a lack of leadership but also as a lack of incentives. If we look at the potential disincentives created by an increasing emphasis on accountability, this may suggest new ways to fulfill those requirements while facilitating sharing of information.

### **Collaboration in the Broader Context**

In assessing the impact of the symposium it is necessary to take into account the structure of the sector, which is characterized by multi-level governance (Maldonado et al. 2009) that defines relationships between headquarters and field organizations, as well as networks of relations between donors, UN agencies, large international NGOs and local NGOs through which resources and funding flow. The diversity of the sector is reflected in the membership of the GloballySympoNet community.

The humanitarian relief community seeks to foster greater collaboration in information management through the establishment of best practices and principles that will serve as standards for the community. While general principles and practices were established at the 2002 symposium, the level of detail that would be required in the Principles and Best Practices to foster collaboration was not achieved. It is probably unrealistic to think that without a sustained and continuous effort that such standards could be achieved. The three days dedicated to the workshops in 2007 did help identify priorities for further work in several domains, however this is far from the necessary standard.

Standards not only provide a common operational and procedural basis upon which collaboration can be built, but also have important implications for professionalization. Standards embody the state-of-the-art knowledge of a sector and acquisition of that knowledge can serve as a mechanism to admit and exclude potential members.

Standards often are developed by increasingly powerful professional organizations during the process of professionalization. Hence, it appears that what the GloballySympoNet community desires is a professional organization that can help establish standards for the sector, which will both promote collaboration as well as increase professionalization.

It may also be the case that in addition to professionalization, the sector, similar to professional communication, is simply becoming more specialized as the result of technological change. While information management has long been studied and practiced by librarians, for many organizations, particularly humanitarian organizations, issues of information management have arisen primarily as a response to changing technologies. However, as discussed earlier the need to collect data for accountability has also increased this role. And as the volumes of data increase specialized skills that expand beyond database design are required. Further as IT becomes diffused throughout the organization, IT staff are likely to become larger and more specialized with a possible outgrowth being a specialization in humanitarian information management. However, whether humanitarian information management emerged organically or through a process of specialization within the IT discipline, the community desires greater coherency, recognition and incentives for inter-organizational collaboration.

### **Future efforts**

Given the findings from our surveys of and interviews with GloballySympoNet members, combined with the insights gained through analyzing the implications of professionalization, it appears that the community needs to identify or develop an organization that can provide more consistent leadership. With more consistent leadership the community will increase its chances of developing standards that can be widely adopted, thereby facilitating broader collaboration as well as fostering greater levels of professionalization.

Research on other humanitarian relief coordination bodies suggests that one model of leadership is achieved by the establishment of non-profit entity that includes dedicated administrative and management positions. Dedicated leadership requires continuous revenue streams, which can be provided through dues. However, for such governance arrangements to succeed, there must be tangible benefits for the members, often times beyond those of standardization. One such benefit can include resource or demand pooling, whereby the community receives discounts on commonly needed supplies related to its mission (e.g. software). Discounts provide the short term financial justification for participation required to allow members to commit the time needed for long term organizational change.

## CONCLUSION

Sector wide collaboration in humanitarian information management will occur in a context defined by professionalization of information management more generally as well as evolving needs for data within the humanitarian relief sector. By accounting for these broader trends this research contributes to our understanding of collaboration in the humanitarian relief sector. In particular, the research analyzes the desire for greater standardization within the sector as a function of both the process of professionalization for information management as well as greater specialization in information technology that is a response to technological change. Based on these insights, recommendations for future actions for the community are made.

## ACKNOWLEDGMENTS

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