

Humanitarian Response in the Age of Mass Collaboration and Networked Intelligence

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ABSTRACT

The current humanitarian system is based on institutions created during the Industrial Age. It was built when connectivity was a very scarce resource and information sharing was something that only happened during meetings. The increased resiliency of mobile communication networks and the proliferation of satellite based network connectivity have led to information being much easier to share. At the same time the rise of social networks and the explosive growth of mobile ownership amongst the affected communities has led to a new way of communicating. Furthermore the large institutional humanitarian response organizations are no longer the only responders, with multiple smaller organizations responding. This paper looks at the opportunities new technologies have provided in rethinking the humanitarian response system and how new approaches may address some of the key issues faced in large-scale disasters in recent years.

Keywords

Humanitarian Response, Mass Collaboration, Networked Intelligence.

INTRODUCTION

We are at a turning point in our history; with many of the institutions we have relied upon failing to meet their obligations. The effects of population growth, climate change, urbanization, globalization and economic instability means that those organizations can not continue to do business like they have done for the last 50 years. At the same time we are seeing a convergence of a technological revolution (often referred to as the Internet Revolution), a social revolution (the growth of social networks) and the rise of the Digital generation (people who have grown up on the Internet). These times are therefore both creating new threats and opportunities and it is crucial that we don't ignore these factors and keep trying things the same way we have always done them.

In the field of humanitarian response we have seen the same signs. The way things were done five years ago no longer work effectively, because of much higher numbers of response organizations and the capabilities of affected population to directly communicate with the world. With the massive growth of mobile phone ownership, the ability to reach out to people and not only provide them information to make better decisions, but also to get in return their input creates new opportunities for addressing humanitarian response in a new way.

In 2010 the United Nations Foundation (UNF) and United Nations Office for Coordination of Humanitarian Affairs (UN OCHA) asked the Harvard Humanitarian Initiative (HHI) to bring together some of the brightest minds in the humanitarian world and write a report called Disaster Relief 2.0 (Harvard Humanitarian Initiative, 2011). This was groundbreaking in many ways because it pointed towards new ways that the traditional humanitarian community could work with the new digital generation of humanitarian volunteers.

A lot has happened since the report was written. We have seen the award winning (International Association of Emergency Managers, 2011) ways the volunteer community helped the humanitarian community get a comprehensive overview of the situation in Libya as the civil war broke out. We saw a massive triple-strike disaster hit a very high tech country and citizens utilize technology to share information with each other (Miettinen, 2011). Finally we are seeing a massive regional long-term disaster unfold in the Horn of Africa and people wondering what can be done to provide assistance.

RETHINKING THE HUMANITARIAN RESPONSE SYSTEM

Almost 7 years ago, following the South East Asia Tsunami, the humanitarian community came together and initiated what became widely known as The Humanitarian Reform (Adinolfi, Bassiouni, Lauritzen, & Williams, 2005). This reform came about because the old model of doing things was not working, especially in large-scale disasters and there was a need to rethink how we handled some of the core issues faced when trying to coordinate the multiple organizations involved in dealing with large-scale humanitarian disasters.

In the humanitarian space, just like in most other areas, the changes we have experienced in the last decade are bigger than in the 50 years preceding that period. It is therefore important for us to start the discussions now on how we need to reform or possibly reboot the humanitarian system for the coming decades. When doing so, it is important to keep the core humanitarian values, but at the same time also apply the 7 principles of the age of networked intelligence as defined by (Tapscott & Williams, 2006). These principles are innovation, collaboration, openness, interdependence, integrity, self-organization and sustainability. In this paper we will go through each one of those principles and discuss what effect applying them to humanitarian response has.

INNOVATION

We need new innovative ways to approach to deliver the services needed in the aftermath of a disaster or crisis. Instead of distributing food vouchers to affected populations, we could top up their mobile banking accounts with funds to buy food. Instead of flying in food from abroad we should utilize technology to help local producers close to the affected area transport and sell their food in areas where food is needed. We should create trading platforms for non-governmental organizations (NGOs) and UN agencies to buy commodities directly from local producers. We should leverage the transportation networks and sales channels of private sector companies like Coca Cola to get the commodities transported.

We need to target the aid we give in more innovative ways. We need to leverage mobile phone technology to determine with greater precision directly from the affected communities the actual needs, not just guess based on not so accurate needs assessment surveys. We know communication is aid and we must figure out innovative ways to increase and harness the information flow and establish the channels of communication (Infoasaid, 2011).

COLLABORATION

The word collaboration comes from the Latin word “collaborates”, which means to work together. Webster defines it as “*to work jointly with an agency or instrumentality with which one is not immediately connected*” (Merriam-Webster, 2011). In the humanitarian world we have more focused on coordination than collaboration in the past. Webster defines the verb coordinate as the act “*to bring into common action, movement, or condition*”. This has often caused issues dealing with other organizations such as the military and the government civil protection because in those organizations things are done through a “command and control” culture.

Interestingly most humanitarian organizations internally have a rather strong culture of “command and control” through their bureaucracies of management levels. But when they interact with other organizations in the field they refuse to adhere to any kind of command and control structure, but have agreed to coordinate with each other albeit some more reluctantly than others. The big issues however is that the mechanisms for coordination are breaking down as more and more organizations get involved and as the scale of the emergencies faced grows each year.

The great research of Professor Emeritus, Dennis Mileti of University of Colorado at Boulder pointed out to us that one of the biggest obstacles to collaboration during disasters are organizations (Mileti, 1999). When disasters strike the organizations tend to fight for attention from the media and the public, they fight political turf battles, they try to utilize a disaster to proof their importance and existence, etc. A great example of this can be found in any country in the world where you can ask a police department if they like their fire department or vice versa. The same also holds true in the international arena where the large UN agencies and the big NGOs fight endless turf battles while people are suffering. But luckily as Dennis pointed out in his research, people come to the rescue (Kim, 2004). It is through individuals in these organizations that collaboration happens, often against the political will of the organization.

In this age of networked intelligence and mass collaboration we must find innovative ways to leverage social networks (both technical and non-technical) to improve this collaboration that is already happening at the individual level. Leadership within the humanitarian organizations must allow for these individual acts of

collaboration to happen and in fact they should be encouraging them. It would also be very interesting to see what happened if the donor community would encourage collaboration in all projects they support.

In one of his early TED lectures Clay Shirky points out that the old way of coordinating is by creating institutions, but since communication costs are going down drastically there is another option, which is to put the coordination into the infrastructure by designing systems that coordinate the output of the group as a byproduct of operating the system without regards to institutional models (Shirky, 2005).

Lets take a concrete example from the humanitarian world of how this might work. Humanitarian response is all about matching needs of the affected communities with the response capabilities of the humanitarian organizations responding. The institutional way of performing this match is to define a lead organization (cluster lead) that is responsible for bringing together all the interested parties (cluster members) to a meeting (cluster meeting) as often as required to get each one of them to report on what they have found the needs to be and then report how they are responding to meet that need. If the cluster lead is doing a good job then they get a good matrix of needs and responses and can then help identify duplication of efforts and gaps in the response.

This model stems from the time communication between the different organizations was difficult/expensive and communication with the affected communities was something you only did during needs assessment missions. But in a world of networked intelligence where the affected communities have a capability to communicate their needs directly and where the response organizations can easily/cheaply communicate with each other the model can be self-coordinating.

Through increased information sharing and better communication it is possible to take collaboration within humanitarian response to the next level and overcome many of the issues faced with current models of coordination.

OPENNESS

Today enormous amount of effort is spent on accountability of humanitarian work. This stems from decades of waste and corruption that unfortunately was quite commonplace. But the methods for averting corruption that were to put in place led to a very rigged accountability processes. At the same time very few of the humanitarian organizations are very transparent about how they spend the money they raise. Of course most of them publish some reports, but if you want to get detailed information about expenditures, then these may be difficult to find.

In the age of networked intelligence then transparency is a new form of power. Rather than being something to be feared, transparency is becoming central to success of organizations. Open organizations perform better (Tapscott & Williams, 2006), so smart NGOs are choosing to be open. One could say they "undress for success."

It is not difficult to imagine what would happen if all humanitarian organizations were open and transparent about their work. If those who provide them with money (both the public and governments) could see in detail how those funds are being used. Instead of massive overhead from accountability processes it would be possible to introduce full openness. This openness will also lead to people finding new and more efficient ways to address the issues faced. If someone notices that a large portion of funding goes towards a particular task in the relief operation, then that immediately becomes an opportunity to find new and more efficient methods.

INTERDEPENDENCE

When the cluster system was introduced 6 years ago, it helped coordination of humanitarian response because it brought together into the cluster all the organizations working on a particular subject area such as health, education, etc. However one of the drawbacks we have seen is that the work of each of the clusters has become more compartmentalized than before. Inter-cluster communication and information sharing is not functioning properly in most emergencies. Humanitarian response however is very interdependent. If you don't ensure good sanitation and hygiene, then you will see health deteriorate. If you don't provide enough food and water to people then you will see malnutrition increase. In many cases you have humanitarian organizations that fully understand this interdependency and therefore work within multiple clusters within the same area.

So what can be done to address this? One approach might be that instead of splitting the various work into different clusters, then it could be split based on geographical areas. An organization then becomes responsible for providing all services to the community in a particular area. If they don't have the specialty to provide a particular service, then they collaborate with another organization that specializes in that field. This way the organization that is responsible for the area can ensure that all the interdependent factors are being addressed and that there are no gaps in the response effort.

INTEGRITY

Integrity is all about doing the right thing, even when nobody is watching. It is possible to leverage the age of networked intelligence to ensure that integrity is an overarching principle that everyone follows. There are multiple examples already of how humanitarian organizations are utilizing technology to monitor their own performance and integrity (Save the Children, 2010). With cell phones now doubling up as cameras and video recorders you never know when someone might actually catch you breaking your integrity. This constant monitoring by beneficiaries and citizen reporters should lead to increased integrity in humanitarian response, even if we loosen the strict models we follow today.

SELF-ORGANIZATION

Following a sudden onset disaster there is great chaos as the people affected by the disaster try to find ways to survive and the large swarm of relief organizations descends upon the affected area. In our attempt to deal with this chaotic system, we try to enforce structure through "humanitarian response systems" that enforce hierarchies upon environments that are not hierarchical in nature. The key reasoning behind hierarchical responses is that information about the overall situation is only available from the top down.

In their seminal paper (Alberts & Hayes, 2003) discuss how the very structured and hierarchical command and control model of the military needs to evolve because with better access to information, even on the battlefield, allows for more rapid and context sensitive decisions to be made at the field level. One of the key points they make is that while strategic direction should come from the top down, the tactical decisions need to be made "*at the edge*" by those on the battlefield.

We can learn a lot from their paper and apply it to humanitarian world. If it is possible to provide field workers with the same level of access to information as people in HQ have and if they are provided with the right strategic decisions, then it is possible to empower them to not only make decisions locally but also to organize locally how they interact with others.

If it is possible to provide everyone with information about what everyone else in the area is doing and allow for them to link up with others working on similar activities then self-organization would start occurring naturally. The key to this however is the ability for organizations to easily report on their activities and areas of interest. If they had a simple way of doing this, then it is very likely all of them would feel very inclined to do so because it is in their own self-interest to avoid duplication and identify gaps in the response.

At the same time it might be possible for the affected communities to quickly see what is happening in their area, who is working there and where there are gaps. That would either allow them to lobby for more focus on unmet needs or to self-organize to help address that need in their own community. Today's humanitarian response system is too closed and doesn't allow for inclusiveness of new humanitarian organizations, let alone the affected communities themselves. It is essential this changes.

SUSTAINABILITY

In recent decades we have seen increased focus on disaster risk reduction activities, but most of these are still in their infant stages and only at the governmental level. In recent years we have also seen increased use of the term resiliency when talking about how to better prepare communities for potential risks.

In the long term focus on risk reduction and resiliency will certainly help us minimize the threats that mother nature throws our way, especially when dealing with the sudden onset disasters such as earthquakes, tsunamis, floods, etc. But when dealing with long-term disasters such as drought we must look for sustainable ways to prevent them from leading to even more complex emergencies such as famines.

But we must also think about sustainability when it comes to providing the humanitarian relief itself. Instead of endlessly transporting large amounts of relief items half way across the world, we must identify ways of utilizing more local and regional resources to help. This in turn can help the local economy and economies in the region grow through production and provision of those relief items. In the big famine in Ethiopia in the late 1980's there was enough food available within the country itself, it simply was not available in the areas where the drought and famine was worst. Yet instead of transporting food from other parts of the country relief organizations transported relief items from other continents and markets for local food in the non-affected areas tumbled.

CONCLUSION

The main purpose of this paper was to get the reader to think about how the humanitarian system might be adapted to more modern ways of addressing the complex problems that everyone faces in the humanitarian world. Some of the ideas presented in this post may be a bit too radical for now, but as the digital generation takes over from the pre-digital generation old-timers in the humanitarian world then many of them might get implemented. It is important to remember that the organizations doing humanitarian work today are not going to change by themselves - it is through the people inside and outside of those organizations that this change must happen and hopefully that in turn over time leads to at least some of the organizations to start thinking in new terms.

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