Benjamin S. Farmer and M. Eric Johnson Tuck School of Business at Dartmouth.

Bill Brindley, CEO of NetHope, fidgeted in his chair as he reviewed a pile of handwritten notes he had taken during his first 100 days on the job. After joining NetHope in June 2006, he had undertaken a listening tour of NetHope member agencies, key technology partners, major corporate and individual donors, and NetHope board members. Each had described a compelling vision for NetHope's future and each believed in the value proposition of NetHope, as a nonprofit organization that facilitated technology collaboration and connectivity among its member international development and relief agencies. Throughout the fall and winter, Bill kept refining his ideas. Yet, as the cherry trees started blooming outside his Washington, DC office, Bill realized that he still had much work to do. With an upcoming board meeting and the 2007 annual summit on the horizon, he was anxious to solidify his ideas and build a strong consensus around NetHope's strategy.

As he thought about the various opinions he'd heard, it became ever clearer why he had been hired as CEO. NetHope had previously been an all-volunteer organization, spearheaded by Ed Granger-Happ, CTO, Save the Children and NetHope co-founder, and led by two successive executive directors on loan from Cisco Systems. Dipak Basu, NetHope co-founder and its first executive director, and Molly Tschang, the second executive director, had successfully incubated NetHope, growing its member base to 16 international nonprofit agencies, and overseen NetHope's role in two major world disasters: the 2004 Asian tsunami and 2005 Pakistan earthquake. Building on these successes, Ed Granger-Happ, now Chairman of the Board, had convinced Bill to take the CEO position in part to provide the leadership continuity that NetHope needed to reach the next level as an organization. He had also hired Bill to figure out what that next level looked like.

Bill looked through his notes again and began to form a few committees in his mind. It was time for a corporate "refresh," as he liked to say, and that would require as much group effort as group consensus. He quickly decided to form an Operations Improvement Committee, a Technology Committee, and a Business Strategy Committee, the last led by himself, Granger-Happ, and his old friend Mike Bear, who could always be counted on for an insightful outside perspective. NetHope's future depended upon providing value to its member agencies, and Bill knew he would have to make some tough choices refreshing NetHope's value proposition.

¹ This research was partially supported by Grant number 2005-DD-BX-1091 awarded by the Bureau of Justice Assistance as part of the Institute for Security Technology Studies. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime. Points of view or opinions in this document are those of the author(s) and do not represent the official position or policies of the United States Department of Justice.

Major Earthquake Strikes Remote Region of Pakistan

On October 8, 2005, an earthquake measuring 7.6 on the Richter scale struck the remote, mountainous regions of Kashmir and Northwest Frontier Province of Pakistan. The quake and subsequent aftershocks were initially estimated to have killed at least 40,000 and injured 70,000 more.² The initial international response focused on saving lives, in particular locating the injured, stranded, and starving. Governments across the globe immediately pledged money to support rescue efforts, followed by personnel and equipment after the Pakistani government accepted such donations. On October 20,UN Secretary-General Kofi Annan requested further international support, citing "... a second, massive wave of death will happen if we do not step up our efforts now,"³ in reference to the estimated 120,000 survivors in remote villages then still in need of medical attention, food, clean water and shelter. Due to heavy rains, mountainous terrain, and lack of infrastructure, over the ensuing weeks tens of thousands more died from mudslides, injuries, and starvation, increasing the official death toll to 72,376 in Pakistan.

Most disaster rescue efforts quickly shift to relief. In Pakistan, the UN estimated that up to four million people were displaced by the earthquake and subsequent rock and mudslides, with many villages entirely destroyed. A cadre of local and international relief agencies and NGOs descended on Pakistan to provide relief services, including NetHope. Then a four-year-old nonprofit consortium focused on IT collaboration among member agencies. Ten of NetHope's member agencies began mobilizing field operations in the affected areas, particularly in Muzzaffarabad and Mansehra. To effectively quantify, coordinate, and distribute the critical food, shelter, medical supplies, and other relief requirements of the Pakistani people, these field operatives and offices would rely heavily on imported satellite-based telephony equipment. NetHope's immediate mission in Pakistan was to coordinate receipt and installation of VSATs (very short aperture terminal) and NRKs (NetHopeRelief Kits) at member agency sites so that field operatives could reliably connect with national and international headquarters. VSATs were satellite terminals that could provide broadband internet access simultaneously to a number of PCs via a satellite telephony provider. These terminals required a technician to install and were not mobile. The NRK was developed for NetHope, primarily by Cisco Systems, to be an easily portable satellite-based broadband access device for first responders during emergencies. The first NRKs weighed 80 pounds, were the size of a checked luggage suitcase, and also required a technician to configure. Without this equipment, the international resource mobilization effort already underway would remain disconnected from tactical need assessments from the field, potentially resulting in further catastrophic loss.

NetHope's response to the Pakistan earthquake was swift. By day three after the earthquake, Kamran Sarwar of ActionAid was conducting daily situation calls from Islamabad with Dipak Basu of NetHope to coordinate member agency involvement. By day nine, \$40,000 in cash had been pledged by Cisco and Yahoo! plus three months of free satellite service from Skylogic. By day 16, two cross-agency teams had been organized, one physical team in Islamabad consisting of agency IT managers and one virtual team consisting of agency IT directors at headquarters. These teams collaboratively assessed the members' collective telephony needs, and by day 19 NetHope had issued requisition orders for VSATs and NRKs. In a summary report dated December 23, 11 weeks after the earthquake, NetHope reported that the ten agencies had deployed 15 VSATs and one NRK in the affected region.

² <u>http://news.bbc.co.uk/1/hi/world/south_asia/4322624.stm</u>

³ http://www.un.org/News/Press/docs/2005/iha1106.doc.htm

Anatomy of an Agency Response

Most of NetHope's members could be described as international relief and development agencies. The individual missions of NetHope's members differed greatly, though categorically each focused on long-term community development, responding to crises with aid supplies, and/or promoting natural resource conservation. Some agencies were more centralized, while many operated as a highly decentralized federation of country-specific organizations. The primary mission of many of NetHope members was community development, often via child sponsorship programs, with an additional commitment to disaster relief, potentially via separate operational entities. And while not every NetHope member was an emergency responder, all had field offices in some of the most remote places on earth.

When disasters struck, international relief agencies required the capability to operate anywhere in the world. In addition to prepositioned supplies in strategic distribution centers and first responder teams on 24-hour call, agencies relied on information communication technology (ICT).

Stage 1. Within 24 hours of a disaster, dedicated first responders arrived on the ground at the site of the disaster. Their sole goal was to assess the situation and report back to headquarters the extent and type of relief supplies required. NetHope's Disaster Relief white paper describes the situation agency responders faced on the ground:

The urgent and immediate need in a hostile environment is to survey and assess damage, transmit pictures, security information, relief material and personnel requirements to Head Offices. ... The foremost requirement, beyond rescue and treatment of survivors, is the ability of aid workers to communicate with communities and countries for coordination of the relief effort. Local communications are almost always destroyed, inoperable, or nonexistent after a disaster strikes.

With local communications down or nonexistent, first responders typically arrived with personal RBGAN (Regional Broadband Global Area Network) or other satellite-based phones capable of basic voice and data communication. These phones provided critical connectivity to home offices, but where expensive to operate and had low data transmission speeds. "At this stage, we just want a dial tone," said Bob Zook, former CIO at World Vision International, one of the largest global development and relief agencies. Additionally, when time meant lives, slow data speeds (100-150kbits/s) could frustrate relief efforts.

Stage 2. As the relief effort progressed, a second wave of responders arrived to manage receipt and distribution of relief supplies, and monitor the ongoing situation:

Teams begin to arrive on the scene as risk of disease and malnutrition escalates. Requirements are continuous monitoring of disaster, assessment of victim needs, management of relief material deployment between and across aid agencies, personnel security, application and reporting of donated funds, uploading of case studies, pictures and relief reports ... [These] small, often roving groups need easy-to-setup-and-takedown computing, communication, and power solutions.

Again, Bob Zook put it more bluntly, "We have more people showing up with ever greater technology needs: email, logistics capture software, project planning programs, and financial management software ... It could be a trailer or fit in the back of a Jeep; what we need is more ICT infrastructure capacity and satellite bandwidth."

Stage 3. As the disaster response team became more established, the effort shifted to longer-term recovery. At that point, agencies provided resources for building reconstruction, counseling, family

reunification, food distribution, water purification, etc. Teams typically sought to establish full-scale ICT infrastructure, often via VSATs, which offered more stable and faster broadband communication when fixed-line (terrestrial) broadband was not available. With the long road of recovery in the present community still ahead, the international relief agencies nevertheless remained on alert to repeat the process during the next disaster.

Agency IT Investment Practices

"Agencies are not getting grants to do infrastructure investment," remarked Akhtar Badshah, senior director of Community Affairs at Microsoft. "They always under-invest in IT because a one-dollar donation needs to go to the field to help a dying kid versus buying a computer. The choice is very clear." Eric Dupree-Walker, a NetHope board member from CARE International, agreed with Badshah in principle, noting, "Nobody's mission says we are going to worry about technology. At budget time what do you say to program people in the field: 'Information security is important?' Well, so are floods." Why, in a business where IT could drive organization efficiency and ICT could save lives, was "chronic underinvestment" in IT commonplace?

Certainly agencies were under external pressure to keep overhead costs low. Most international relief agencies publicly reported their financials via an Annual Report similar to publicly held corporations. And similar to public companies or educational institutions, the opinion of external rating agencies could greatly affect donor (or stockholder or student) relations and perceptions. Watchdog organizations like Charity Navigator published detailed evaluations of nonprofits and charities based on proprietary ratings methodologies. While Charity Navigator did "not recommend using [its] ratings as the only factor in deciding whether to support a particular organization," agencies still wanted to avoid being labeled one of the "10 Charities Stockpiling Your Money" or "10 Highly Paid CEOs at Low-Rated Charities." Given that Charity Navigator's Organization Efficiency metric relied solely on a combination of four expense ratios, it was not surprising that relief agencies paid very careful attention to the cost breakdown of a donor dollar.⁴ In fact, an earlier Accenture study for Catholic Relief Services suggested that while government agencies might spend 5-7% of revenue on IT, and retailers typically 3%, investment among global relief and development agencies ranged from less than 1% to 3%. Underinvestment in IT was also an effect of decentralization. Bob Zook of World Vision noted that "as recently as 2004 I could count the number of organization-wide IT programs we supported on one hand, without using all my fingers. ... We use IT just to keep the field programs running. That means minimal investment and a focus on local investment. We have Lotus Notes for messaging and collaboration, a finance program to track the dollars. a child sponsorship system, and a donor management system. Everything else is local, including probably as many payroll systems as we have countries." Encouraged by the recommendations of an organizationwide strategic review with assistance from Booz-Allen-Hamilton, World Vision began making a major investment in ICT connectivity and IT infrastructure in 2006.

At the field level, technology investment was usually limited to PCs, donated operating system and document software, and leased telephony lines providing dial-up or broadband internet access, if available. Agencies typically purchased equipment locally, and hired local PC technicians to mange and support the limited infrastructure.

⁴ For more information on Charity Navigator and its rating system, see <u>www.charitynavigator.org</u>.

Akhtar Badshah of Microsoft summarized the situation, lamenting that "there is a huge disparity between ICT usage and capabilities among NetHope members. Over the past 2-3 years there has been quite a bit of change in understanding and using technology. However, there is much left to do and the pace has been much slower than we expected." Eric Walker-Dupree recognized this potential for donor fatigue. "If we only focus on information transfer, which is of course critical to NetHope's value proposition, donors may start to ask, 'Are we paying you to collaborate?""

Recent Industry Developments

Over the previous few years there had been at least two major initiatives pushing for more effective IT investment. One such initiative, the Interagency Working Group on Emergency Capacity Building (in part funded by the Bill and Melinda Gates Foundation and Microsoft), had recently published an Emergency Capacity Building report, assessing the use of ICT among international relief agencies during disaster relief operations. Among the key findings of the report was the following list:

ICT is an ideal area for NGO joint-capacity building for several reasons:

- 1. The current gaps are having a negative impact on collaborative and efficient emergency work in the field;
- 2. The gaps tend to be common across organizations, readily identified, and relatively straight forward to address;
- 3. There are few reasons to have organizationally tailored ICT in emergency field work and many reasons to support standardization, and
- 4. There is high potential for implementing ICT capacity building in ways that benefit the entire humanitarian sector.

Taking a different tack, the Fritz Institute promoted supply chain education and developed logistics software for international relief agencies. Founded by Lynn Fritz after the sale of his company, Fritz Logistics, to UPS, the former private sector executive believed that IT-enabled logistics could revolutionize the humanitarian sector as it did in commercial supply chains. The first version of his Humanitarian Logistics Software, developed in partnership with International Federation of the Red Cross and Crescent (IFRC), sought to track the pipelines of supplies, information, and financing from donation to delivery. This system was an enterprise application that required significant systems investment, which many agencies could not afford. So Fritz developed a second version, called HELIOS, which was web hosted and could be delivered as a service. It too focused on providing visibility across the humanitarian supply chain from mobilization to warehouse. While initial pilots at UK-based Merlin were encouraging, the business process changes required were a significant barrier to adoption, including navigating unique user requirements by location due to local law and partner arrangements.

These two organizations, one an industry consortium and the other a not-for-profit, sought to drive technology into the heart of agency operations in order to improve responsiveness, productivity, and effectiveness in the field. Another key player in this pursuit was NetHope.

NetHope Inception and Evolution: 2001-2006

During the global IT slowdown in 2001, Cisco Systems, a global IT network equipment provider, faced significant short-term financial challenges as revenues declined. In order to retain top talent and bolster its corporate social responsibility goals, Cisco Corporate Philanthropy established a program that allowed numerous employees to engage with nonprofits through its Community Fellowship Program. Michael Yutrzenka, the director of Public Benefit Investment, oversaw the placement of 81 Cisco employees to 21 organizations for one-year externships. In March of 2001, Ed Granger-Happ, CTO at Save the Children, presented his Wiring the Global Village white paper to Cisco, in which he hypothesized that nonprofit agencies could solve their common ICT problems more effectively and be more attractive to corporate partners via a collaborative working group. At Mike's suggestion, Ed brought on Dipak Basu as a Cisco Fellow at Save the Children. Both Basu and Granger-Happ agreed that technology, particularly network technology, could improve the effectiveness of field offices during emergency relief operations in remote regions. More importantly, they agreed that there was a large gap between then-current common practices among global relief agencies' use of network IT and its potential. Together they decided to pursue creation of an inter-agency organization that would pool IT talent, resources, and donations across the largest global relief agencies to better leverage their individual efforts.

In October 2001, Basu and key supporters convinced Cisco to sponsor a forum for US-based international relief agencies to form an ongoing consortium to pursue joint network IT projects. As Basu recalls, "Each NGO sent 1-3 people, but the overall atmosphere was non-collaborative." Not that this surprised Cisco. Michael Yutrzenka remarked later, "The nonprofit sector has a tendency to create great organizations based on passion, but business aspects are not always taken into account." Cisco understood the value in partnering, even with rivals at times, to pursue joint benefits, and so continued to support Basu's efforts. Basu and Granger-Happ convinced the attendees to pursue a network IT pilot program in relief regions that otherwise had poor infrastructure. Cisco agreed to make a \$ 100K equipment grant to network 25 target sites with VOIP (voice over internet protocol) technology. With the help of Accenture, forum member locations were prioritized and the equipment was successfully installed in agencies' sites in Afghanistan, Pakistan, and Sudan. Networked field site calls were directed through a Cisco Call Manager in Menlo Park, which would direct calls to the appropriate destinations. The success of this project showed that while agencies normally "competed" for donor dollars, there was significant leverage potential in a single, network IT-focused nonprofit consortium.

Emboldened by the pilot's success, Granger-Happ, Basu, and Cisco Fellow David Yang used their personal networks from Save the Children and Cisco to invite relief agencies to become members in NetHope. To maximize scale and impact, they typically targeted international relief agencies with greater than ~\$500K in annual IT spend. Basu and Granger-Happ's message was simple. They were not trying to sell the benefits of information communication technology—this much was clear to the agencies from their own experience—but rather to sell the benefits of inter-agency scale efficiency when deploying ICT in difficult circumstances. Basu's relationship with Cisco and Michael Yutrzenka was both the carrot and the stick: Cisco would channel most "event" (e.g., 2004 Asian tsunami, 2005 Pakistan earthquake) product donations through NetHope, while agencies could still request separate grants for one-off projects. Twenty-five agencies were identified in the initial screen, and 18 eventually became NetHope members representing nearly \$4 billion in global relief and development (see Exhibit 1). Along the way NetHope received pro bono and cash support from many organizations such Accenture, Baker & McKenzie, Yahoo!, Surdna Foundation, and the W.K. Kellogg Foundation.

NetHope's Value Proposition

From the beginning, NetHope worked to develop a well-defined strategy. Given the nature of relief and development, there were many opportunities pulling the organization in different directions. Working with Accenture, the group sought to define a strategic focus that balanced the tension between opportunistic activity and long-term development (see Exhibit 2). Key to this discussion was an understanding of the consortium's core competencies and the value of collaboration.

Between 2001 and Brindley's appointment in 2006, NetHope developed a vision centered on three areas of strategic focus:

- Sharing ICT knowledge for rapid and effective deployment and efficient operations;
- Collaborating with nonprofit and industry leaders to develop best practices for public benefit technology deployment in the NGO world, and;
- Facilitating innovative and cost-effective use of ICT.

As Brindley took the helm in 2006, there nevertheless remained as many ideas about the value and future of NetHope as there were stakeholders. NetHope had three major stakeholder groups, including its members, management, and donors. Of course, members themselves had many different perspectives, even within the same organization. For example, agency delegates were typically CIOs who had a global perspective versus field IT personal who were locally focused. Likewise donors were diverse from computer hardware and software firms to foundations and government agencies. As the founding and history of NetHope revealed, there was significant interplay between donors, agencies, and NetHope management, at multiple levels of each organization (see Exhibit 3 for a stakeholder map).

The following are excerpts that provide a sample of the perspectives represented by these stakeholders—the founders, donors, experts in the field, and member delegates.⁵

The Founders' Perspective

Ed Granger-Happ, NetHope co-founder and Chairman of the Board; CIO, Save the Children

The vision for NetHope began with a white paper Ed Granger-Happ wrote during his first year as CTO of Save the Children, entitled "Wiring the Virtual Village." Only three months after he presented that paper at Cisco Systems in March 2001, Dipak Basu joined Save the Children as a Cisco Fellow and the two set their vision into motion. Granger-Happ shared:

From the beginning, NetHope was all about collaboration and connectivity. We are really focused on making the connection for the last 100km—that is where it gets tough. For example, as part of an ongoing project we have deployed 83 satellite dishes—mostly in Africa, but also in Iraq and Afghanistan. The idea is to get good internet connectivity out to the field offices.

However, I find one of the biggest benefits of NetHope is the collaboration. It is like free consulting. For example, if I am having a communication problem in Africa, I might call

⁵ Interviews for this case study were conducted in early 2007. The industry practices and environment, interviewee perspectives, and NetHope's circumstances are described as they existed at that time.

Brian from Oxfam and he usually knows exactly what to do. I think of it as staff extension. It more than pays for my \$15,000 annual NetHope dues. Of course, free software and hardware are also compelling. But the collaboration is an investment that keeps growing.

Over time, we hope to move the NetHope funding model to be balanced—a third each, between member dues, in-kind donations, and cash donation. Today dues represent closer to 50%, while cash donations represent only 20%. We hope to change that.

Dipak Basu, NetHope co-founder and first Executive Director

"There is a big hole in international telecommunications among agencies," noted Dipak Basu, NetHope's co-founder. "The problem is that field offices want to focus on programs not telecommunications, but need information communication technology to effectively deploy these programs." Basu had been involved in international telecommunications development for nonprofits in India as early as the 1980s, and with Ed Granger-Happ at Save the Children and Cisco's support, launched NetHope to collaborate around global agencies' ICT needs. In April 2006, Basu moved into a consultant role for NetHope. Said Basu:

Our vision for NetHope is to facilitate agencies' implementation of ICT in difficult circumstances.

NetHope's future is to replicate some of the success we have shown in disaster relief across other areas of ICT need. For instance some software grants can be most effective through NetHope. By acting as a central source for donations we can leverage our collective need, standardize reporting and compliance, address collective integration issues, and quickly bring new technologies to the field. We can achieve collective scale and maximize the donor's intended impact. For big one-off projects members may not want to go through NetHope, however, during disasters we may be able to accelerate aid requests by collecting members' needs and presenting one request to key donors.

We can also leverage our scale elsewhere. Negotiating master service agreements with hardware, software, and access providers saves members money while also creating a common IT support network. We are investigating the idea of extending this approach into a "NetHope store" with standardized services or pricing.

Collaboration is the key to NetHope, and sharing this beyond the membership via articles and whitepapers should be central to our mission. However expanding membership itself is difficult. There are a limited number of large agencies so member growth must come from smaller NGOs, who will be more likely to be net "takers" than givers.

Bill Brindley, NetHope CEO

"NetHope has done incredible things over the past five years," said Bill Brindley, "and it is now time to take the organization to the next level, particularly in terms of diversified, robust funding and a refreshed vision, leveraging the past and planning for the future." Brindley shared his thoughts on NetHope's overall mission:

I think of NetHope's vision in terms of five Cs: Collaboration, Connectivity, Contribution back to the members and community, our Customers, and enabling IT to be a Catalyst. Therefore, when the project filter committee meets every week we have to ask ourselves three questions: 1) Is it a good idea? 2) Does it deliver value to members? And 3) Do we

have the leadership team to pull this off? We are an all-volunteer force—we can't scale up easily, so how do we keep delivering value?

NetHope provides value to members in three areas: information, return on investment, and insurance. The information collaboration between members, ad hoc and formalized in white papers and articles, is what NetHope was founded upon and remains our core. NetHope is also an investment, and must provide an ROI. For instance, leveraged sourcing—we have negotiated a master service agreement that allows our members to access satellite connectivity at a much lower cost than they could individually. Using this model, we envision a "NetHope store" with as many as 30 products and services that members can purchase at member prices. Software development and application service provider (ASP) models are tricky, but active in my thinking—perhaps a hosted collaboration platform. Lastly, NetHope can provide significant risk mitigation for members. The NRKs we deployed in Pakistan showed that members need something that can be used by non-IT personnel and is much smaller, much cheaper, with ten times the connectivity capacity. We are also looking at a smart-phone for data collection in the field. By developing and trialing such products and projects at the NetHope level the members share the risks and rewards.

Going forward I think we should grow in three ways. One is to fill in a few member gaps, particularly internationally, which has been a clear goal since NetHope's founding. We should also consider expanding our exposure to CIO advisors at corporations and direct collaboration with the UN agencies we often work alongside. Finally we should consider giving back to smaller agencies or even local NGOs in the field, sharing our learnings while expanding our network in anticipation of future projects and disasters.

The Donors' View

Michael Yutrzenka, Director of Public Benefit Investment, Cisco Systems

"Cisco as a corporation supports using the internet as a means of helping NGO effectiveness," remarked Michael Yutrzenka, Director, Public Benefit Investment at Cisco Systems. As Cisco faced a significant market downturn in its core businesses in 2001, the firm realized the long-term value of keeping key employees in the Cisco family. Through the Cisco Fellows program, Michael oversaw the deployment of 81 Cisco employees across 21 nonprofit organizations, including Dipak Basu to Save the Children and later Molly Tschang, who participated in an enhanced Cisco Leadership Fellows Program, to NetHope. Cisco's support of NetHope had included two Cisco Fellows, significant dollar and equipment donations, and engineer development time for the NetHope Relief Kit. Commented Yutrzenka:

No one can afford an individual engagement with every deserving NGO. However, NetHope creates a collaboration organization among these NGOs to allow a corporate partner to have a broader impact. At Cisco, we believe that we can leverage our resources better through NetHope.

The nonprofit sector has a tendency to create great organizations based on passion, but the business aspects are not always taken into account. However, these NGOs are beginning to realize the value of IT as well as the value of collaboration. While they sometimes act as competitors for dollars they can also act as collaborators to achieve joint goals. Frankly, we think NetHope is a natural evolutionary step in this process. NetHope's true success is the collaboration between members to share best practices. The value of this consulting could be significant compared to NetHope membership fees in any given year ... But NetHope must evolve to share services ... I don't see devices as the best direction for NetHope because services are more valuable to the members. ... The NRK, for example, was brought forward as a response to a specific need, and it is fine for that need.

Akhtar Badshah, Senior Director of Community Affairs, Microsoft

"We believe NetHope started off slow, but has grown into a strong agency-run consortium where the consortium leadership believes in the value," noted Akhtar Badshah of Microsoft. Microsoft had been a frequent and significant donor of software and cash to multiple international development and relief agencies and NetHope. In 2006 alone, Microsoft donated \$41M in software through NetHope and the Inter-agency Working Group to its members. Microsoft was also a key sponsor of the Inter-agency Working Group on Emergency Capacity, alongside the Bill and Melinda Gates Foundation. Said Badshah:

With grants and donations we want to strengthen an organization and its mission. Technology has a role to play during emergencies and relief agencies need help to do that. We want to support what needs to happen, which is putting ICT in the field, without putting an undue management burden on ourselves. Therefore we believe NetHope is the best network to deploy the resources we want to donate. Cooperation yields a better return on investment for us which is why we are pushing nonprofit recipients in that direction. Internally, lots of people spend time talking and thinking and escalating big grants, so giving a single big grant to NetHope gets visibility as a concept within Microsoft, benefiting all the member agencies as well. And having close ties to NetHope allows us to quickly escalate any grant implementation issues that arise via NetHope leadership. NetHope can help focus our efforts on the role Microsoft can/should play.

For example, NetHope is trying to go into ICT capacity building so they can use all of the technology that is being donated to these organizations. In this case Microsoft is partnering with a technology NGO to benefit non-techy international relief agencies doing great work. I suppose NetHope could become an application service provider (ASP), but they would first need to show the value add they could bring using market research and analysis. They could otherwise be a clearinghouse, negotiating better deals for members with ASPs, for instance.

The Experience in the Field

Kamran Sarwar, IT Coordinator, ActionAid

"NetHope can speak as one group to big technology donors. Big technology companies want to help in disaster relief but their donations are often not used well. NetHope helps ensure relief donations will go to good use. That is a huge value to the donors," claimed Kamran Sarwar, an ActionAid IT Coordinator located in Islamabad, Pakistan. Sarwar led a team of ten IT field personnel from various member agencies as a virtual NetHope chapter during the Pakistan earthquake in 2005. His role was to coordinate NetHope's support of member agencies' ICT needs in the field. Sarwar shared this story:

The very first days of a disaster are when we need ICT the most. In Pakistan, most of the NetHope ICT equipment arrived about one month after the earthquake. It took another month and a half to install NRKs and VSATs in affected areas, in part due to clearance issues at the airport. Local telephony had already been reestablished by this time.

NetHope's role was to provide equipment to field offices. During the first meeting in Islamabad, the various agencies' IT managers did not know each other and had some concerns about collaboration. However, we quickly saw the benefits of collaboration and collective decision making.

In the future, the goal is to deploy NRKs to the various member agencies so that it becomes a piece of checked luggage for first responders.

Govi Pillai, Senior Technology Advisor, World Vision

"Connectivity is our primary reason for coming together as a group," offered Govi Pillai, who was responsible for implementing World Vision's Global Connectivity program, which was then deploying over 200 VSATs across field offices in Africa. Shared Pillai:

When World Vision attended the inaugural NetHope member meeting, we loved meeting the other NGO IT personnel. They understood the challenges we all face. Relief makes the news but the volume of the work is in development. The value of NetHope therefore is connectivity and collaboration. For instance, we can leverage our collective demand when trying to negotiate broadband at project sites. And when World Vision was new to satellite technology, we benefited from the collective knowledge and expertise of the group. For us, as new countries prepared to implement VSAT technology, through NetHope we had the learning curve ready to go to help them implement.

For its "Phase II" project, NetHope collected the members' ICT requirements and bid it out on our behalf. Based on the RFP responses from global vendors, NetHope helped the group select VSAT technology from Skylogic and negotiated a Master Service Agreement (MSA) and price list on our behalf. Members are responsible for signing their own contracts based on their specific needs, but the contract reflects our collective leverage.

Going forward NetHope must continue to focus on delivering value to members. The NRK, for example, was a good experiment. The need is very real and each NGO member is trying to create a similar ICT kit. Having gone through the learning curve for the NRK together, we can now move to a generic spec that better serves our needs. There is also surely a temptation for NetHope to go into service provision, which of course it should never go. It's also worth something that some donors prefer to deal with one consortium since everyone typically goes to them individually.

Member Delegates

Paul Cunningham, IT Director, Catholic Relief Services

"As international development has gotten more businesslike and more dangerous, we look at other agencies as collaborators, not competitors ... at least at the top of the agency and in the field offices," remarked Paul Cunningham of Catholic Relief Services. Paul was the IT Director at CSR, itself a \$694M

(FY 2005) international relief and development agency operating on five continents and in 99 countries. Cunningham commented:

The special thing with IT people is that there is a greater willingness to share information. Systems either work or they don't and we can share that information and learn from other people. We like to benchmark ourselves against other agencies and to learn best practices. There is also certainly some degree of specialization among members from which we all benefit through collaboration.

Our organizations are competitors. However, the work we do is not much of a zero-sum game so we often work together. But none of us are angels. If we see a need and an opportunity, most of us will exploit it, but we feel we are stronger together than as competitors. For instance, during the 2004 tsunami, most of us did not have resident offices in that area, so we were in the same boat. We could have done it alone but having Dipak as a point contact to negotiate our collective need with Skylogic [satellite access donor] freed us from having to deal with it. Nevertheless, some competition does exist around grants.

Conceptually the NRK value proposition—quick network availability—is brilliant and is something that we still need. However in the Pakistan earthquake the execution was not great. This was not due to the Cisco people that designed it. Rather this was a technical fix looking for the right problem. I am not too enamored by the technology. Technology is there to serve. There are no tech silver bullets. So far the NRK is a good example of NetHope stepping into an area where it was not strong. There are too many cooks in the kitchen creating a more complex device than the problem it was trying to solve.

Right now, the member dues are not an issue relative to the value-add of NetHope. Just this year, we received \$3M in software as part of the Microsoft grant through NetHope. This is valuable to us because we had tried on our own to get grants from Microsoft and failed. Sometimes the value of NetHope can be hard to quantify, but grants like this make it clear. The current membership criteria were wisely intended to create a commonality among members' issues and problems. If we add small agencies, there may be a tendency for them to want more benefit than their capacity to give to it.

Peter Dickenson, IT Director, Mercy Corps

"IT is the last thing added to the budget and the first thing cut," stated Peter Dickenson, IT Director at Mercy Corps. Mercy Corps is dedicated to emergency relief, sustainable economic development, and human rights initiatives across the globe. Started in 1979, in FY2005 it raised more than \$185M in financial support and donations. Said Dickenson:

Microsoft and Cisco have been pushing us to collaborate. While there is competition for funds, within the IT field we can be much more collaborative than competitive. For instance, as a group we may not have the economies of scale to drive down tech vendors' prices, but we could negotiate better service. Microsoft also funded ECB4 for a while, and going forward NetHope should take on that collaborator role for emergency capacity building.

NetHope members have an informed knowledge of key ICT issues that we face. By sharing lessons learned we avoid critical mistakes. NetHope is also able to deliver ICT technology—ideally faster, better, and cheaper than we could on our own. In Pakistan we certainly benefited from NetHope's VSAT deployment, even though DSL came back

within three months. Regarding applications, however, NetHope's role is more difficult. It likely could not be cost effective as an ASP, but perhaps as a broker to ASPs. And while seamless collaboration tools such as the ones we are evaluating for use among NetHope members are effective, when a crisis happens we go right back to email. The NetHope challenge is execution. There are lots of good ideas that are hard to make happen and require members to carve out time to invest. Sustainability will likely require more members and more training, and a focused program management team.

The Future of NetHope

Back at his desk, Bill Brindley mused over the progress NetHope had made since his listening tour. In October 2006, NetHope won the prestigious Grand Prize in the Non-Profit Category of the Cisco Growing with Technology Awards, which recognized organizations that demonstrated how networking technology solutions could effectively address business challenges. NetHope had also signed on two new members, Concern and Opportunity International, both non-US based agencies that filled important gaps in the membership base. Combined with the October release of a white paper, development progress on the NRK v2, and increases in funding, Bill felt like things were really gaining momentum.

Nevertheless, he knew that Board of Directors expected him to propose a clear direction for that momentum during its spring meeting. He poured over the findings and recommendations of the Operations Improvement Committee, Technology Committee, and Business Strategy Committee, as well as his personal notes on each. It was time for a corporate refresh, and up to him to present the future of NetHope. The strategy had to address both sustainable funding mechanisms and a clear direction for business activities. Should NetHope be a:

- Technology funding hub?
- Software services provider?
- Equipment innovator?
- Procurement service?
- Industry association focused on networking and education?
- Thought leader?

Exhibit 1: NetHope Member Agencies

Organization	Mission	FY 2005	Website
		Income	
ActionAid	ActionAid is an international	€168M	www.actionaid.org
	development agency whose aim is	(\$198M)	
	to fight poverty worldwide.		
	Additionally, it responds to global		
	emergencies with long term		
	recovery and immediate needs.		
CARE	CARE is a leading humanitarian	\$624M	www.care.org
	organization fighting global		
	poverty. CARE also delivers		
	emergency aid to survivors of war		
	and natural disasters, and helps		
	people rebuild their lives.		
Catholic Relief	Catholic Relief Services' mission	\$694M	www.catholicrelief.org
Services	is to alleviate human suffering,		
	promote development of all		
	people, and to foster charity and		
	justice throughout the world. It		
	aids the poor by first providing		
	direct assistance where needed,		
	then encouraging people to help		
	with their development.		
Children	Children International's mission is	\$107M	www.children.org
International	to help children living in dire		
	poverty by providing children		
	with program benefits and services		
	that meet basic needs, enhance		
	their self-esteem and raise their		
	physical and educational levels in a		
	meaningful, lasting way.	<i>Ф10135</i>	2
Christian	Within the context of alleviating	\$191M	www.ccfusa.org
Children's Fund	child poverty, vulnerability and		
	deprivation, Christian Children's		
	Fund creates programs that provide		
	practical assistance to		
	nipoverished communities and		
Canadan	Concern Worldwide on social	-CI21M	
Concern	Long term development work	(142)	www.concern.net
	respond to amergency situations	(\$145101)	
	and sock to address the root causes		
	of poverty through our		
	development education and		
	advocacy work		
Heifer	Heifer International works to and	\$78M	www.haifer.org
International	world hunger and protect the conth	φ/0ΙVΙ	www.nenei.org
memanonai	through livestock grants, training		
	and "passing on the gift" Heifer		
	and passing on the gift. Hener		

	helps build strong communities because each project participant		
	agrees to pass on the gift of animal offspring, training, or skills to		
	another family in need.		
International	IRC is a global leader in	\$196M	www.theirc.org
Rescue	emergency relief,		
Committee	rehabilitation, protection of human		
	rights, post-conflict development,		
	resettlement services and advocacy		
	for those uprooted or affected by		
	violent conflict and oppression.		
Mercy Corps	Mercy Corps exists to alleviate	\$185M	www.mercycorps.org
	suffering, poverty and oppression		
	by helping people build secure,		
	productive and just communities		
	through emergency relief services,		
	sustainable economic		
	development, and civil society		
	initiatives.		
Nature	The Nature Conservancy's mission	\$943M	www.tnc.org
Conservancy	is to preserve the plants, animals		
	and natural communities that		
	represent the diversity of life on		
	Earth by protecting the lands and		
	waters they need to survive.		
Opportunity	Opportunity International-U.S.	\$44M	www.opportunity.org
International	strives to reach the world's poorest		
	people through its microenterprise		
	development programs.		
Oxfam	Oxfam International is an	\$528M***	www.oxfam.org
	international group of independent		
	non-governmental organizations		
	dedicated to fighting poverty and		
DI	related injustice around the world.	\$50134	
Plan	Plan aims to achieve lasting	\$501M	www.planinternational.org
International	improvements in the quality of life		
	of deprived children in developing		
	countries by enabling deprived		
	children, their families and their		
	communities to meet their basic		
	increase understanding and unity		
	and promoting the rights and		
	interests of the world's shildren		
Poliof	Paliof International is a	\$21M	www.riorg
International	humanitarian non profit agancy	φ211 VI	www.iii.org
mumanonai	that provides emergency relief		
	rehabilitation development		
	assistance and program services to		
	vulnerable communities		
	worldwide		
Save the	Save the Children seeks to create	\$397M	www.savethechildren.org
Children	real and lasting change for children	<i>40711</i>	
	in need in the United States and		
L		1	1

	around the world through a unique self-help approach to relief, recovery, and ongoing development.		
Wildlife	The Wildlife Conservation Society	\$153M www.wcs.org	
Conservation	saves wildlife and wild lands		
Society	through careful science,		
	international conservation,		
	education, and the management of		
	the world's largest system of urban		
	wildlife parks.		
Winrock	Winrock International is a		www.winrock.org
International	nonprofit organization that works		
	with people in the United States		
	and around the world to increase		
	economic opportunity, sustain		
	natural resources, and protect the		
	environment.	* · · · = · · · ·	
World Vision	World Vision International is a	\$1970M	www.wvi.org
	Christian relief and development		
	organization working for the well		
	being of all people, especially		
	children. Through emergency		
	relief, education, health care,		
	economic development and		
	promotion of justice, World Vision		
	helps communities help		
	themselves.		

*** Program expenses, excluding management costs.

Exhibit 2: NetHope's Strategy Planning

What is NetHope's Primary Focus?

Impact or Relief Areas Sizeable Regions Degree of Focus on Establishing or	Example for High table Government (or ernment in transition) clear Regulatory Environment Degree of Focus on Establishing or	Long Term Developer: Focus on Building Out Fewer, But More Sizeable Regions
Significantly Improving Existing Communications Opportunistic: Site by Site Evaluation Penetration in Populated Areas	Significantly Improving Existing Communications temet Connectivity urrently Available (slow) Low	Cost Minimizer: High Volume Penetration in Populated Areas
to Existing Service (better service or lower cost) Low Degree of Focus on Reducing High Communication Costs • Low Volume, Point Solutions, Highty Flexible • Optimize Sourcing and • Highly Stan	Existing Service (better svice or lower cost) • Low Vo Solution • Optimiz	cus on Reducing High ication Costs • Leverage High Volu Economies of Scale • Highly Standardized



Exhibit 3: NetHope Stakeholder Map