**The Vision**

*"If you want to build a ship, don't herd people together to collect wood and don't assign them tasks and work, but rather teach them a yearning for the immensity of the sea." --Antoine de Saint-Exupery*

My vision for technology at IFRC is simple and ambitious: *One Village.* In a village, location does not matter for the conversations and the work to take place. Individuals and families are respected, and yet everyone participates in understanding problems, collaborates on reaching and funding solutions, and celebrates the measurable impact that is realized, all in a transparent way.

A story may illustrate this:

*“The student embraced her cello, bow raised, eyes fixed on a sheet of music, attentive to the teacher’s words. The teacher held his own cello, but with bow lowered. The object of their attention: a difficult Bach suite from the “Anna Magdalena” manuscripts. At the teacher’s prompting, the student played two passages, from different parts of the suite. As she completed the second, a startled look crossed her face. The teacher noted her change of expression.*

*‘Yes,’ said the teacher, “they have a parallel structure.”*

*The student nodded, excited.*

*‘Have you notice that before?”*

*“No. It’s… important… I see that.”*

*The teacher smiled. The student played again. Moments later, she mused: ‘It’s good. It’s very …’*

*‘Yes,’ the teacher agreed, ‘that Bach—he’s a pretty good composer…’ The student erupted in laughter. The teacher joined in. A moment later, the lesson continued.”*[[1]](#footnote-1)

The interesting thing about this story is that the lesson took place with the student at Harvard in Cambridge, MA… and the concert master in Miami, FL. A high-speed, high-definition and high-fidelity Internet2 network provided the connection so that the “resulting qualitative experience was rich enough to convey subtle meaning.”[[2]](#footnote-2) Imagine if this was member team in Reykjavik speaking with a community leader in Port au Prince? How rich could the conversation be?

Some new conversations we could be having:

1. The televised speech – Bekele addresses the whole organization. This is a one-to-many conversation. It can happen in real-time on cell phones and video conferencing, and can be downloaded as podcasts the next day.
2. The community preparedness group in Manila makes a presentation on their new plan to an audience of program managers in the US, UK and Geneva. This is the many-to-many conversation
3. A donor posts their video of one of our programs on YouTube for the world (and us). This is the one-to-many in reverse
4. A BRC public health expert in Mali finds a health worker in Guatemala and they have a video conversation via SKYPE about a new program that’s had increased impact in Guatemala. This is one-to-one conversation using a pragmatic form of knowledge management: find the expert (and discover the program success where it occurs)
5. A disaster preparedness training session takes place around a cell phone. The group watches a video clip on the phone in their local language.
6. A country director needs to have a meeting with a technical group in Geneva. She picks up an Internet phone and dials the four digit extension of the manager who puts her on a speaker phone with his team.

These are half a dozen conversations that we can and should be having at IFRC and in our broader community of stakeholders. We can imagine this; we need start by asking *what if…?* When we have this vision in mind about what is possible, then we can begin to talk about what we need to build, borrow and partner to make it a reality. Our technology strategy is driven by no less.

**The IT Strategy Pyramid**

A way to talk about this strategy is through a simple model of a pyramid, like the one shown below. The pyramid reminds us that we have significant and large foundations that make possible a few momentous impacts at the summit.

One of the questions we need to ask ourselves is to whom does the application face? Much of the technology capacity building to-date has been internal—bringing information-based work up to current standards for our employees in Geneva and the Zones. The focus initially has been on infrastructure building, providing the basic foundations required for technology applications to be effective, at first in headquarters and increasingly in our country locations. Based on the demand for closing some basic gaps, we could spend all our time and budget building infrastructure. But that would mean missing the strategic opportunities that are possible.

**Figure 1: Orders of Technology Impact**



Source: IS Strategic Model

Among the stakeholder-facing applications, we can see four orders of technology (Figure 1.) The first-order applications (Beneficiary) are those used directly by the vulnerable in our programs. Technology applications that are used directly by beneficiaries are the most strategic use of technology for an International Non-government Organization (INGO.) Some examples of these applications are in Appendix A.

The second-order applications (Program) are those that improve program delivery to beneficiaries. These are further down the pyramid of strategic applications (see Figure 1 above) and are comprised of the work flow applications that improve the productivity of program delivery. Examples of these include Emergency Response (ER) applications, Supply Chain Management (SCM) applications (including Logistics), Program-Project Management applications, and Measurement and Evaluation (M&E) data collection and reporting applications.

Third-order applications (operational) deliver the revenue and the operations that help build the first two. Examples include Volunteer Management Systems, HR Management Systems (e.g. SAP) and Finance Management Systems (e.g. CODA)[[3]](#footnote-3). For members, being able to raise more donations, and do so for less cost per dollar, and operate more efficiently means that more money gets to our beneficiary’s programs.

The fourth-order systems (Foundational) are the infrastructure that underlies all three of the others. This includes Desktop PCs, Office Application Suites, Email, Internet, Servers and Communications. At IFRC it has become evident that basic connectivity is the foundation for everything else we need to do with technology. No connection means no automated information flow. Collaboration groups, like NetHope[[4]](#footnote-4) are focused on delivering connections to the most challenged areas of the world in which we work, going the “last 100 kilometers” to reach those in need whom we serve.

**A Strategic Portfolio**

The technology strategy changes for each level of the pyramid. For the Foundational level, the objective is to drive out costs so the IT unit cost decreases. This means “getting out” of traditional, commodity data center, support and networking businesses and redeploying our people to support technologies “up the technology pyramid” for the benefit of our members. This will be done by sharing more services across the Federation and other INGOs through partnering with technology companies and organizations like NetHope. In some cases we will look to “in-source” services where this is more cost effective; in other cases we will outsource them. In either case we will seek lower unit costs while improving quality and standardizing processes. As the corporate world learned over the past decade, variation in processes is an unnecessary cost, especially for commodity processes.

For the Operational level, the objective is to leverage more commercial fit-for-purpose, off-the-shelf commercial applications (COTS) and take a “buy” rather than “build” approach. For most of the operational level applications, such as finance and donor management software, there is little opportunity—or reason—to differentiate ourselves from other INGOs. The longer-term costs of customization are significantly larger, even when the initial costs appear lower. Renting smaller, specific Software-as-a-Service (SaaS) applications like Cornerstone for HR functions will be goal.

For the Program level, the objective is to connect and deliver. As noted above, “wiring” our NS offices with increasing bandwidth, is the prerequisite. It is the subsequent web-based applications that run on our field network that provides the return on our investment. Key objectives at this level are to deliver the applications that build the capacity of NS fieldworkers so that doubling the number of beneficiaries we reach does not mean doubling our staff. Supply Chain Management (SCM), DM&E, and Program Project Management applications come to mind.

For the Strategic level, we should be able to answer the question: What new programs (that directly serve beneficiaries) have we engendered that would not have been possible without the new use of technology? This is the most strategic use of technology—that which directly moves the mission of our organization forward. These are the applications that we need to “get into” as we “get out” of business of managing lights-on systems.

For a nonprofit, it is hard to justify IT expenses that are focused only on the desktop or back office (the lights-on IT). IT success means new and revitalized programs that leverage technology. So we need to approach our IT projects as if it were a portfolio of investments, with objectives and initiatives at each level. The overarching goal is to move the technology agenda up-the-pyramid so that we become stronger in having real and lasting impact on the vulnerable of the world.

1. Robert Austin and Stephen Bradley, The Broadband Explosion, 2005, p.3. [↑](#footnote-ref-1)
2. Austin, p. 4. [↑](#footnote-ref-2)
3. The “Big-6” business systems categories for INGOs are Donor (and Volunteer) Management, Financial Management, HR Information, Program Management, Knowledge Management (including eLearning and Collaboration), and Supply Chain Management (including Logistics and Disaster Management) [↑](#footnote-ref-3)
4. For NetHope background, see <http://www.nethope.org/about.html> . I co-founded NetHope with Dipak Basu, a Cisco Fellow, in 2001 and continue serve as its chairman. Also see the original vision paper I authored that engendered NetHope, appropriately titled “Wiring the Global Village” on my website, here: <http://www.fairfieldreview.org/hpmd/EGHprofile.nsf/links/50A6> (under 2001 publications) [↑](#footnote-ref-4)