

Ways Technology Impacts Those in Need and Those Who Meet Needs

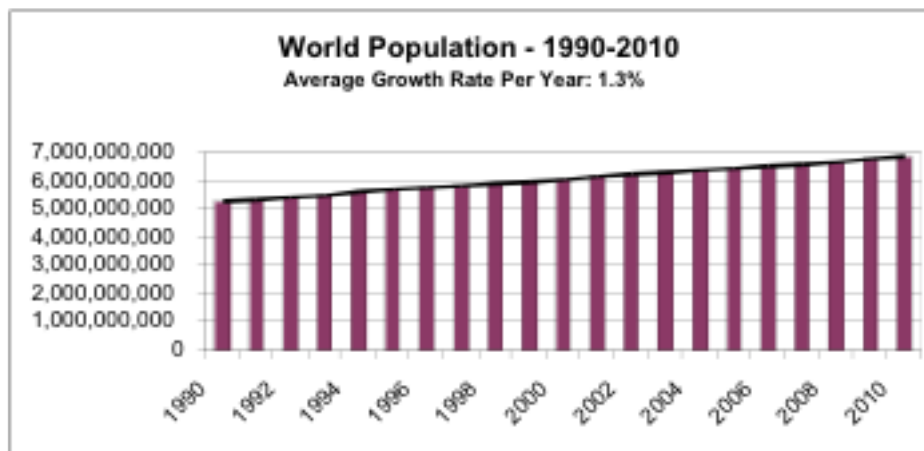
How Technology Meets Critical Needs in the Developing World

Technology is a key capacity building service for effective communications, operations and strategic impact on poverty in the world as it moves from organization-facing to beneficiary-facing applications. Capacity building is a much used term in nonprofit organizations. It can mean training, adding headcount and the ability to scale up programs. But these are often linear growth opportunities. Increasing the impact of scarce resources requires the productivity enhancing capabilities that only technology can offer. In short, technology helps the same people get more done. And this means reaching more of the disadvantaged in the world for the same donor dollar.

Why is technology such a critical need in addressing world problems such as poverty? First, we need to look on the global level for the broader context; then we will look at some on-the-ground program results where technology is making a difference at Save the Children.

Here are some sobering global statistics: First, the world population continues to grow at a rate of 1.3% per year (Figure 1).

Figure 1: World Population Growth

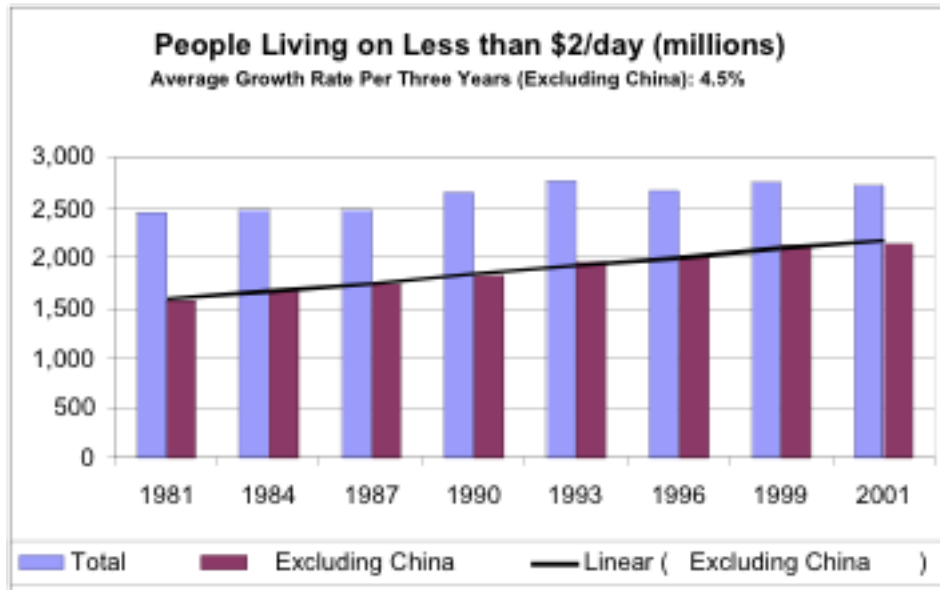


Source: U.S. Census Bureau, International Data Base

Second, world poverty is growing even faster, at a rate of 4.5% per year (Figure 2). The situation is even worse in sub-Saharan Africa where the poverty growth rate is 8.7%

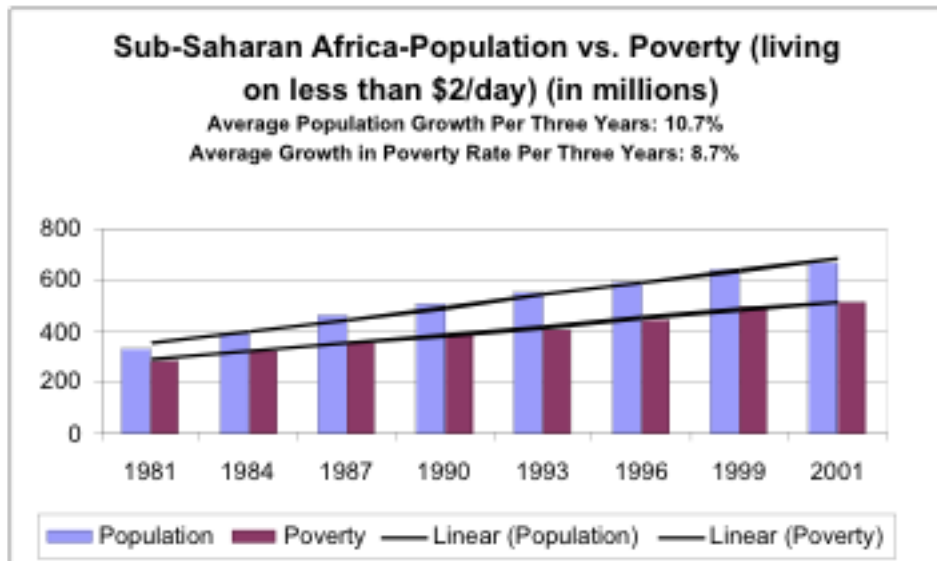
annually (Figure 3).

Figure 2: World Poverty Growth



Source: The World Bank Group: World Development Indicators

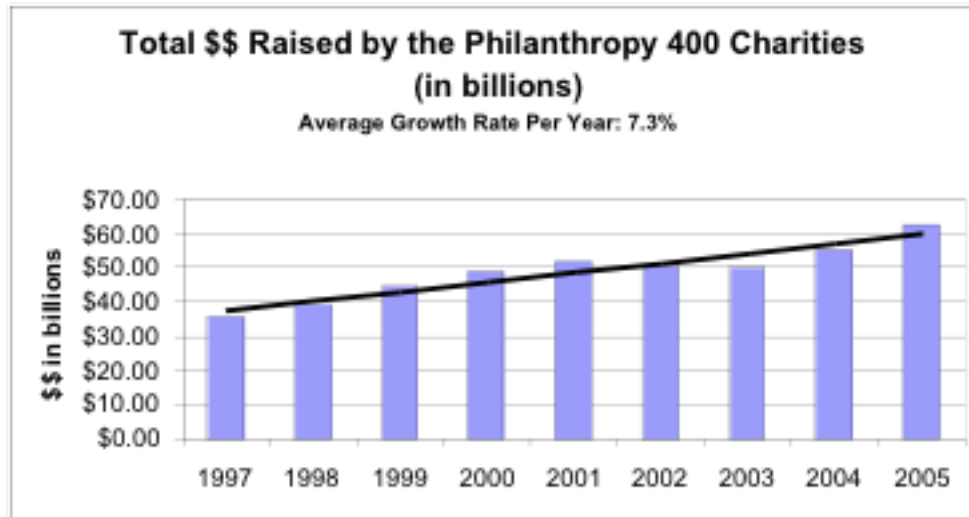
Figure 3: Population and Poverty Growth in Africa



Source: U.S. Census Bureau and World Bank

Third, this is happening despite a 7.3% growth in donor giving (Figure 4).

Figure 4: Donation Growth in the top U.S. Charities



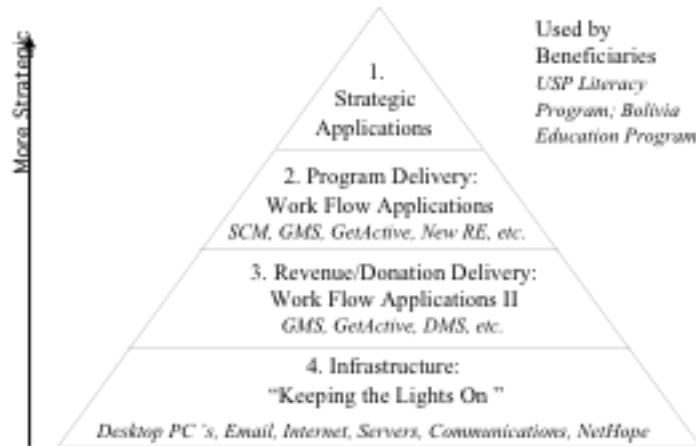
Source: The Chronicle of Philanthropy, October 26, 2006

The bottom line is that we are not having the impact needed to stem this rising problem and begin to reverse it. There is a strong and compelling need for greater effectiveness, efficiency, and yes, capacity building. We need a quantum leap in impact that requires doing things in radically different ways.

One of the questions technology leaders (and non-technology leaders!) of nonprofits need to ask is to whom does the application face? Much of the capacity building to-date has been internal to charitable organizations—bringing knowledge and information-based work up to current standards. The focus initially has been on infrastructure building, providing the basic foundations required for technology applications to be effective, especially in a far-flung international non-government organization (INGO). It is clear to those of us on the front lines of INGO technology that we could spend all our time and budget building infrastructure. But that would mean missing the strategic opportunities that are possible.

Among the beneficiary-facing applications, we can see four orders of technology (Figure 5.) The first order applications are those used directly by beneficiaries. In the case of Save the Children (SC), beneficiaries are the children and more often mothers in our programs. Technology applications that are used directly by beneficiaries are the most strategic use of technology for an INGO.

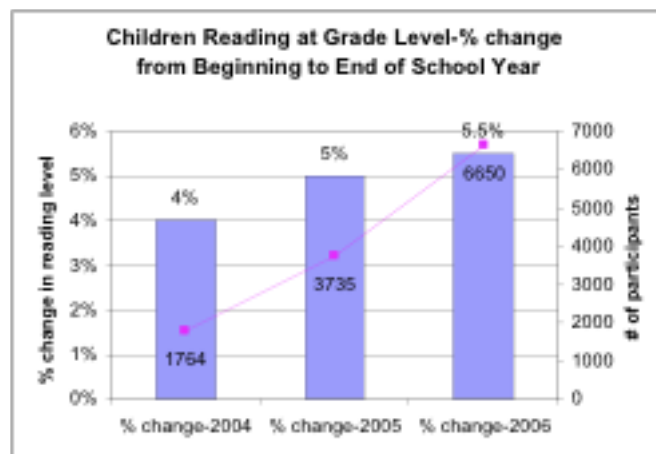
Figure 5: Orders of Technology Impact



Source: Save the Children IS Strategic Model

For SC, one example is the literacy training program in our U.S. rural education programs. Children use the Accelerated Reader application on PCs to take practice reading exercises and tests. Scores are rolled up to the school and district levels for review, and nationally for program managers (and potentially for major donors) who can logon with their browsers and see how many more children are reading at grade level per donation dollar in support of this program. This is SC's first end-to-end technology driven program, and it's growing at 95% per year in children reached. More importantly, 5% more children are reading at grade level each year (Figure 6).

Figure 6: U.S. Literacy Program Impact



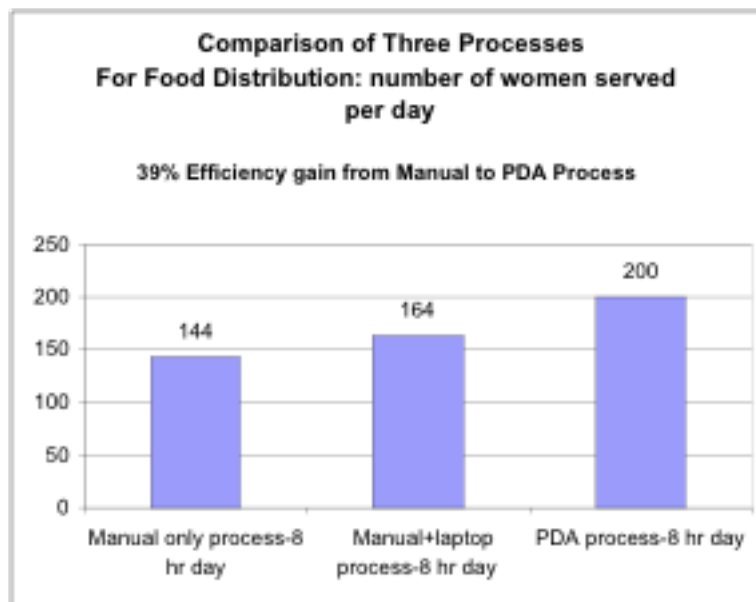
Source: Save the Children Data

The second-order applications are those that improve program delivery to beneficiaries. These are further down the pyramid of strategic applications (see Figure 5 above) and are comprised of the work flow applications that improve the productivity of program

delivery. Examples of these include Supply Chain Management (SCM) applications, Program-Project Management applications, and Measurement and Evaluation (M&E) data collection and reporting applications.

In Bangladesh we are distributing food to 192,000 people monthly. Historically, food distribution was tracked and reported using paper forms, a long, administrative process. Laptops made it possible to serve more people, but laptop batteries died after two hours of use and fieldworkers had to revert to paper. Porting the tracking application to PDAs which with maximum battery packs could last ten hours, translated into a 39% savings in data entry time (Figure 7). Lest anyone think this is merely a data efficiency gain, being able to handle 39% more transactions per day could mean the difference between life and death for women and children who walked kilometers to the food distribution center and who are waiting in line in 90 degree and 90% humidity weather for food rations. Going home hungry is not an option.

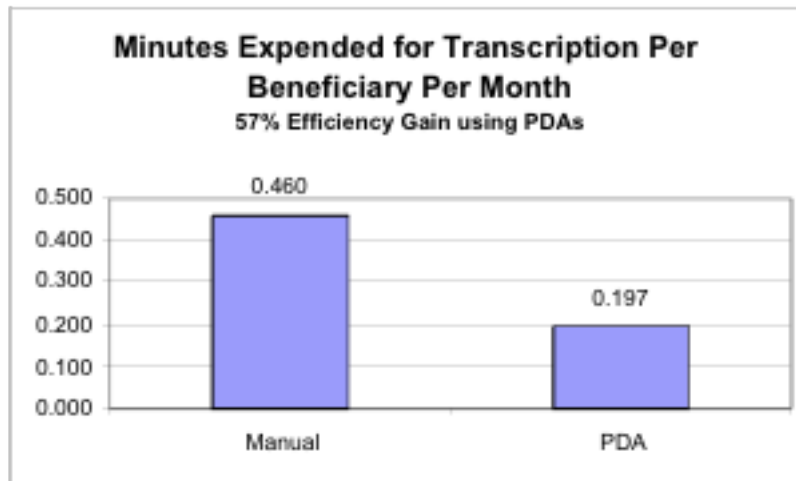
Figure 7: Bangladesh Food Distribution: Transaction Input Rates



Source: Save the Children Data

In Bolivia, 18,000 poor are enrolled in SC's food distribution program. Historically this program was tracked by collecting paper forms in El Alto, traveling an hour back to the country office in La Paz and taking 17 days per month to transcribe data into a database and report on results. Again, by applying PDAs to this work flow, we were able to reduce data collection and reporting from 17 days per months to just over 7 days, for a gain of 57% (figure 8).

Figure 8: Bolivia Food Distribution: Data entry & Reporting Rates



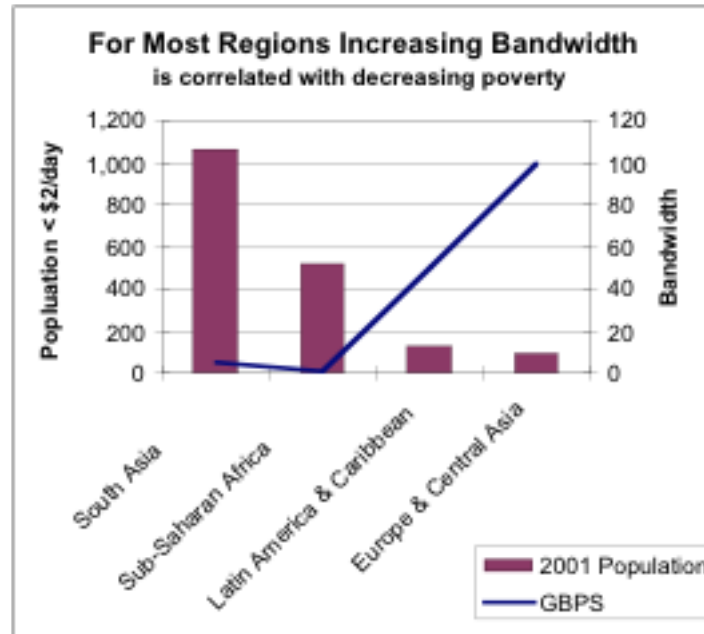
Source: Save the Children Data

Third-order applications deliver the revenue that helps build the first two. Examples include Donor Management Systems (DMS), Grant management Systems (GMS) and online, web-based donation applications such as GetActive. Being able to raise more donations, and do so for less cost per dollar, means that more money gets to our children’s programs.

The fourth-order systems are the infrastructure that underlies all three of the others. This includes Desktop PCs, Office Application Suites, Email, Internet, Servers and Communications. At SC 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, which SC helped found, are focused on delivering connections to the most challenged areas of the world in which INGOs work, going the “last 100 kilometers” to reach those in need whom we serve. While cause-and-effect conclusions cannot be drawn, it is interesting to note the correlation of regional bandwidth and poverty levels (Figure 9).

Connecting the poor with information relevant to their livelihoods has delivered interesting and important results from the pay cell phone cottage industry that Muhammad Yunus’ Grameen Bank has incubated among poor women in Bangladesh to the elimination of fraud in Costa Rica by connecting farmers to the on-line port of export prices—which brings us full circle to the first order technology applications that beneficiaries use themselves. The question is how many of the supporting applications in the second to fourth order levels does it take to deliver these most strategic applications. How nonprofits can move their technology investments up this pyramid will determine how strategic their technology use and impact will be. How effectively corporations and the academic community can partner with INGOs will determine the quality and reach of our impact.

Figure 9: Bandwidth versus Poverty Levels



Source: U.S. Census Bureau and Telegeography Global Bandwidth report

Edward Granger-Happ
CTO, Save the Children
Chairman of the Board, NetHope, Inc.
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William Brindley
CEO and Executive Director

Contact Information

NetHope, Inc.
PO Box 6704
McLean, VA 22106-6704

info@nethope.org
703.388.3845