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Concern's Knowledge Quarterly Review

KNOWLEDGE MATTERS

The Role of Technology at Concern Worldwide

CONCERN worldwide

Any contributions, ideas or topics for future issues of knowledge matters. Contact the editorial team on email: knowledgematters@concern.net

The views expressed are the author's and do not necessarily coincide with those of Concern Worldwide or its partners.

Knowledge Matters basics

Knowledge Matters offers practice-relevant analysis relating to the development and humanitarian work of Concern Worldwide. It provides a forum for staff and partners to exchange ideas and experiences. The publication is committed to encouraging high quality analysis in the understanding of Concern's work. Concern staff and partners document their ideas and experiences through articles. Articles are very short – 500 – 1,500 words. Usually you only have space to make two or three interesting points. Here are some tips on writing a short feature article:

- Start by imagining your audience – a Concern colleague. Why are they interested – why do they want to read what you have to say? When you identify what your most important point is, say it straight away, in the title or first sentence.
- What can others learn from your story? Focus on this. Remember to back up your story with evidence. This can be got from evaluations.
- It's easier to get people reading if you start with the human perspective – mentioning real people and real-life events. (You don't have to give names).
- Use short sentences. Use Concern's style guide to help you.
- Keep paragraphs to a maximum of six lines long.
- Use clear language. Many of the readers of Knowledge Matters are non-native English speakers, so think carefully about using idioms or colloquial language that might not be easily understood by others.
- Always avoid assuming too high a level of knowledge of the topic you are writing about, on the part of the reader.
- Use active sentences ('we held a workshop' not 'a workshop was held by us')
- Use short and clear expressions.
- Keep your title short - no more than eight words.
- Where necessary use photos to accompany the narrative but ensure that you follow the Dochas Code of Conduct on Images and Messages.

Cover image: Gosbert Mutasingwa interviewing Reuben Nyerere in Ngara, Tanzania on the 19th of April 2013. Photo by Ciarán Walsh, 2013.

Contents

From the Issue Editor

Welcome to the Technology edition of Knowledge Matters. This issue is dedicated to exploring the benefits, challenges and learning gained from the diverse ways in which Concern employs technologies in our work.

When I joined Concern in 2007, the IT department was a traditional one, focused on providing staff with access to tools such as email and file servers which needed a physical network connection in order to work.

Technology has changed dramatically since then, and so has our IT team. Concern email is now hosted in the cloud, many offices have WIFI and improved connectivity. On the programming side we have digital data gathering tools, mapping technology and solar solutions which have been welcomed by our worldwide staff and partners.

As we look forward to a new Strategic Plan we have taken the opportunity to reflect on our uses of technology and share some learning with our colleagues around the globe. Technology evolves to meet the changing needs of the people who use it, and should be user driven to be most effective. We hope the learning in this issue will ignite conversations about how technology can make a difference and look forward to hearing your thoughts and feedback.

Ellen Ward

How Digital Data Gathering can improve Monitoring and Evaluation Practice

By Ciaran Walsh, Aine Magee, and Kai Matturi

Introduction and background

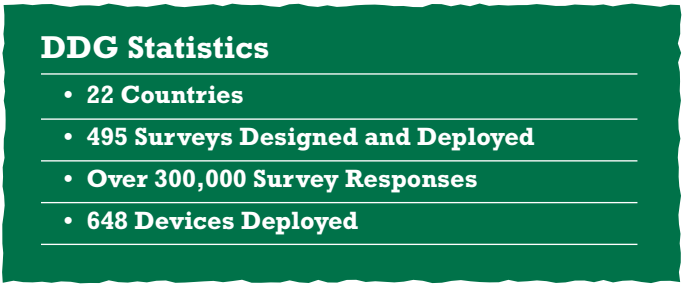
For development and humanitarian organizations, collection of meaningful data has become essential not just to achieve positive outcomes at the level of individual projects but to compete effectively in an increasingly crowded aid sector. Donors are increasingly demanding value for money and verifiable impact.

They are not just insisting on results. They also expect aid projects to be implemented in the most efficient way. This is why Monitoring and Evaluation (M and E), long neglected, is gaining traction within the aid sector. It is now mandatory for programme implementers to generate baseline, mid-line and end-line data.

Collecting meaningful and timely data is easier said than done. Historically, the collection of programmatic data has involved paper-based questionnaires and inputting data into an information management system. More recently, various actors have been looking to the new world of Information and Communication Technology (ICT) to increase the efficiency, speed and accuracy of data collection. Thanks to ICT, data can be collected using hand-held devices and seamlessly transferred through Digital Data Gathering (DDG) solutions, that is seamlessly to a back-end server for storage and analysis.

In a bid to improve its quantitative survey data, Concern has over the last number of years utilised DDG. DDG was first piloted in Malawi in 2011, as a way of more accurately collecting and managing data for the Accenture funded Conservation Agriculture programme. It has since been scaled up to be used in almost our entire programme countries, used in most programming areas. There is now a dedicated, cross functional project team established in Dublin (Ciarán Walsh – DDG Project Lead & Gretta Fitzgerald – DDG Survey Adviser), providing IT and programme support to country teams. The rest of this article explores the contributions that DDG has made to Concern's M and E practice. The article will conclude by providing the reader with some thoughts on the future trajectory of DDG within Concern[1].

Figure 1: Overview of DDG Usage



Instantaneous Access

Digital solutions reduce the time between survey completion and programme managers' access to data. With manual data entry of paper survey results, it takes a minimum of four weeks from the actual survey to the delivery of a full and clean data set to the project team. Having access to accurate data in real-time accelerates evidence based decision making.

Improved Data Reliability

Improvement in error control increases the reliability and quality of data. Requests for monitoring data can be met instantly. Image capture enables visual confirmation of answers. Reduction in error at capture point and removal of the need for manual entry obviates the need for comprehensive data cleaning. The system that Concern uses enables inbuilt controls in electronic forms (e.g. to prevent enumerators skipping questions or control the range of values that can be inputted). This too reduces errors and improves data quality. Experience shows that the removal of the manual data entry phase eliminates the greatest source of error.

Reduction in Data Loss

Automatic uploading of data to a web server using Wi-Fi or SIM connections, as well as storage of data offline until a signal can be found means that data leakage is greatly reduced. GPS functionality mitigates against deliberate data fabrication by enumerators.

Centralised Data Management

DDG facilitates the development of a centralised data management system. A uniform solution built within a required format ensures conformity in how data is approved/rejected, analysed and formatted. This helps to ensure data integrity. A centralised data management system ensures that evaluators can readily access information and data rather than having to trawl through stacks of paper surveys. There are clear efficiency gains to be made here.

> It is important to bear in mind that the application of technology does not solve all data collection and analysis problems.

Gosbert Mutasingwa interviewing Reuben Nyerere in Ngara, Tanzania on the 19th of April 2013.
Photographer: Ciarán Walsh.

Rapid Data Analysis

The ultimate aim of the DDG project is to increase programme quality through timely access to quality information for decision making. Using DDG increases the speed of data collection, decreases the potential for survey error and allows immediate access to the raw data online. In addition, there are other less well known features of the DDG system that contributes to timely access to quality information. For example, the online Survey Processing feature allows survey responses to be checked, edited, approved or rejected before an export of the data is done. This results in a dataset that requires minimal cleaning and is ready for analysis immediately. There is also a very convenient Summary Report function. Summary reports are automatic and immediately generated on the online DDG platform with summary statistics for each question in the survey. Using summary report means there is no need for complicated data analysis and automatic calculations of indicators values can be accessed immediately. This is another way DDG speeds up access to quality information for programme staff.

Challenges remain

However it is important to bear in mind that the application of technology does not solve all data collection and analysis problems. DDG should be seen as a tool to improve data collection, but it does not negate the need to follow key M&E processes. Without a log frame, well defined, measureable indicators and a comprehensive M&E plan, using DDG will just result in faster,

more efficient collection of poor quality and difficult to analyse data. Data collection is one step in a process, but the other steps remain equally important. It is essential that we know what is being collected, why and how it will be analysed. Having planned for this before data collection starts ensures that the advantages of using DDG are maximised and relevant data is collected in a timely manner, and is easily analysed to yield useful information to guide programme management.

Looking Ahead

Routine Monitoring

Over eighty percent of respondents to a recent survey[2] aimed at measuring the impact of DDG on programme quality reported they intend to scale up DDG usage in their country. This shows that DDG is still growing in popularity, in relevance and in use. There needs to be continued investment in DDG to ensure this appetite for DDG continues and that all features of the system (including survey processing and summary reports) are used to their maximum potential.

To date, DDG has primarily being used for household surveys, specifically gathering data on beneficiaries before and after programme implementation to judge the effectiveness and impact of our work. In some countries, DDG is being used for regular data collection. The Conservation Agriculture programme in Malawi and Zambia is a good example of how regular data is collected via DDG and automatically generated reports are being used to track progress towards results. Regular monitoring and routine data collection is an area where there is the potential to expand use of DDG. Use of DDG forms and checklists for all regular monitoring would remove the need for multiple paper data collection forms, data inputting and time consuming analysis. This would allow more real-time decision making and will further improve programme quality.

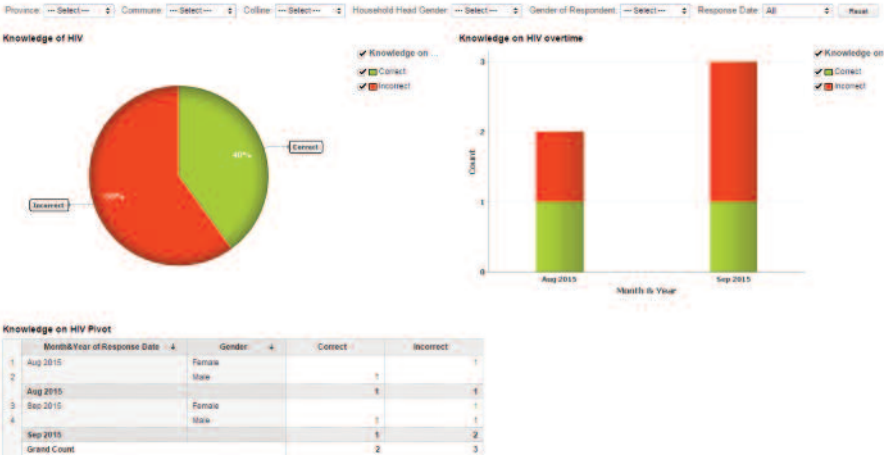
Standard Indicators and Reports

Up to now, each DDG survey has been custom built with similar questions asked in different ways across different countries. This creates a huge amount of work in designing, building and testing surveys and results in data being analysed in slightly different ways. Thus values for so called standard indicators are often not comparable across countries and it isn't always obvious how each was calculated.

The next phase of the DDG project aims to introduce an element of standardisation into the DDG system. Standard indicators used commonly across programmes will be defined in terms of standard questions which will be built in individual "modules" on the DDG system. Automatic analysis will be built into each module so post-data collection, reports will output the actual indicator value, removing the need for manual analysis and the potential for differing interpretations of how an indicator value should be calculated. Reports can be automatically emailed, or embedded into websites or intranets for easy consumption. It is hoped that this will greatly enhance the usefulness of the DDG system in that indicator values can be updated immediately following data collection allowing for immediate assessment of progress and timely

decision making by programme management. Cross country comparison on Concern standard indicator could also be made, allowing assessment of the effectiveness of particular programme strategies in different countries. There will also be benefits in the speed and efficiency of survey building and the potential for mistakes in questionnaire design will decrease.

Figure 2: Sample report based on correct knowledge of HIV Standard Indicator



Concluding thoughts

In conclusion, perhaps the primary motivation of ICT enthusiasts is their appreciation of the potential of ICT innovation to contribute to the improvement of the human condition through, for example, improved M&E practice. However, aid actors must not remain blind to the perils of widely held deterministic and utopian expectations that ICT, by virtue of its technical properties, holds the key to a better future. Having said this, the benefits that ICT brings to the field of M&E clearly illustrate that ICT tools are essential to improving M&E practice.

References and Content Notes

1. For more in depth information about how DDG works, check out the DDG Yammer Site and the DDG Intranet Page.
2. This survey can be found on Knowledge Exchange.

Why Technology Matters for NGOs

By Lauren Woodman

NetHope's mission is to act as a catalyst for collaboration, bringing together the knowledge and power of 43 leading international humanitarian organizations so that the best information communication technology and practices can be used to serve people in the developing world.

We do this by working across our **membership** as a highly collaborative team, solving common technology problems, fostering strong **relationships with private industry** and educating our members and the wider humanitarian community, worldwide.

For at least 20 years, there has been considerable discussion about how Information Communications and Technology (ICT) can be effectively applied to the work of the humanitarian and development sector.

The gains in productivity, scale and impact that technology has brought to the commercial sector have been tremendous and many of these advances have applications that could improve the lives of millions more around the world. For NGOs like Concern working in some of the world's most challenging environments, leveraging the benefits of ICT can offer tremendous advantages.

Operational use of technology – to support finance, streamline communications, manage personnel, simplify purchasing and contracting, to name a few – has clear utility across an organization. None of us could imagine working without email, or managing a global payroll without computerized finance systems. For charities and nonprofits constantly under pressure to minimize operational costs, these systems can help lower overhead and free resources to support core programmes. Even when measured against the implementation and maintenance investments, the benefits are self-evident.

ICT can also support the rapid and broad scaling of field programs. By using technology in the field, practitioners can learn from one another to develop better interventions; we can share knowledge across the sector so that we are not reinventing the proverbial wheel. Effective programmes can be adapted to new geographies and successful strategies can be applied to different problems.

As mobile and internet connectivity increases and the cost of technology decreases, communicating directly with communities and individuals becomes possible, be that with a cash transfer, SMS communications or a range of data collection and information sharing options.

Finally, ICT can increase the impact that any organization may have through data analysis and application. Knowing what works is critical: no NGO has sufficient resources to maintain programs that are not achieving desired results. Conversely, everyone – NGOs, donors, governments and local communities – has an interest in extending or replicating successful programmes. Being able to measure outcomes, and use data to evaluate and compare different interventions, is greatly simplified through the use of ICT. Real time Results Based Management (RBM) is made possible by this move to digital data.

> Despite the promise of technology, however, too many NGOs still struggle with its effective use.

Despite the promise of technology, however, too many NGOs still struggle with its effective use. Technology is often considered an operational tool, supported as budgets allow or to address discrete operational challenges. Few organizations have well-considered technology strategies that span home office operations, fundraising and a wide range of program work. And even fewer organizations are willing or able to undertake the work needed to reorganize well-established work patterns, divisions or responsibilities that deep integration of technology often requires.

Looking at the use of technology in other sectors, there are important learnings from others' successes and failures that speak to the need for deeper integration of technology across our respective organizations. Four lessons stand out:

1) **The market expects, and increasingly demands , technology integration**. Private philanthropy, public-private or multi-stakeholder partnerships are increasingly common funding streams in our sector. Foundations and other non-government funding organizations are eager to maximize the impact of their investments, of course, and believe that technology offers significant promise for scale and impact. As a result, they want to see organizations embrace technology thoughtfully, with comprehensive, considered and integrated technology strategies.

2) **Engagement matters**. For years, organizations everywhere have leveraged websites, social media, Customer Relations Management (CRM) and a host of other tools to build awareness among consumers. In recent years, we've seen the No-Makeup Selfie and the Ice Bucket Challenge catalyze millions into taking action to support causes and organizations in substantial terms: The No-Makeup Selfie raised 8 million pounds, and the Ice Bucket Challenge raised $100m in a single month in the US and an additional $54m for Amyotrophic Lateral Sclerosis (ALS) charities in Canada and the UK. None of this would have been possible without a conscious effort to adapt to and actively adopt emerging technologies.

> Fully embracing technology across an organization can be challenging, and at times a little unsettling, but it is a shift that can have a tremendous return

3) **Network effects.** Bob Metcalfe, the inventor of Ethernet, coined "Metcalfe's Law" many years ago to explain the value of networks. The value of a network, he said, was equal to the square of the number of nodes attached. In other words, the bigger a network, the more valuable it is. Our ability to connect with others is critically important and technology facilitates that broader community and enables an organization to connect with other organizations, supporters, and the communities in which we work, which in turn increases relevancy and impact. Whether leveraging social media for fundraising or cloud-based collaboration tools to scale through local partners, technology empowers us to apply the power of networks to our work.

4) **Data matters.** Mission-driven organizations like Concern are always seeking to improve interventions and develop programs that truly help communities in need. We collect data, analyze results, and adjust to better meet evolving needs. But technology allows us to do so in a way that simply isn't possible in an offline world. Not only can we collect data more easily and from a wider variety of sources, sophisticated data analysis tools are widely available that allow organizations unprecedented insight into what works, what doesn't, and why. Data from multiple projects, geographies, and time periods can be deeply analyzed, helping organizations measure, evaluate, and enhance programmes to ensure that every effort is relevant and impactful.

   Many organizations are quite good at collecting and analyzing data about their field operations. Today, however, we learn more through the sharing of data with and from others. For many organizations, this seems too risky, and certainly, there are important security and privacy concerns that must be addressed. But there are also well-established approaches that support strong data protection while at the same time opening access to data for new interpretations and insights.

   Allowing others to interpret data can have tremendous impact, as a handful of smart financial analysts demonstrated a few years ago by being able to seemingly "predict" earnings from US firms before public statements were made, often contrary to what other, more established firms were expecting. The UBS Investment Research didn't have a crystal ball – instead, they were using widely available satellite imagery to track how many cars were coming in and out of the parking lots, a strong indicator of sales and earnings. What others might learn from sectoral data could be potentially invaluable if it helps better inform our work and improve the lives of millions more.

These four considerations shed some light on why and how an NGO might embrace technology and achieve the widely recognized, but often under-realized gains in productivity, scale and impact that have been so beneficial in other sectors. Fully embracing technology across an organization can be challenging, and at times a little unsettling, but it is a shift that can have a tremendous return – the opportunity to serve the world's poorest communities more effectively and with greater benefit to people's lives.

Shining a Light on Developing Countries

By Nicole Malick and Ellen Ward

Sabina KC lives in Dolakha District, Nepal and her family received a solar light as part of Concern's earthquake response. Photo by Alastair Taylor, 2015.

Poverty and Darkness

It is estimated that more than 1.3 billion people do not have access to reliable electricity. Another billion people have access to electricity but either cannot afford it or do not have sufficient energy to run basic appliances[1].

Concern Worldwide and Flexiway Solar Solutions, a subsidiary of NRS International, a designer, manufacturer and distributor of core relief items, public health products and solar solutions, have been trailblazing a path to achieve a brighter future for many through providing developing communities with fit-for-purpose and cost-effective energy and lighting solutions. This article discusses the experiences and lessons that have emerged from this partnership.

The necessity for such action is now highlighted on the global stage. In 2011, the United Nations' (UN) Sustainable Energy for All (UNSE4All) initiative declared that, "*Access to modern energy services is fundamental to human development and an investment in our collective future."* The provision of affordable and sustainable energy was placed at the centre of the universal global agenda for the next 15 years when it was defined as one of the UN's new Sustainable Development Goals.

The UN also marked 2015 as the *'International Year of Light and Light-based Technologies*' to raise awareness of how technologies can provide solutions to worldwide challenges in energy, education, agriculture, communications and health and can be instrumental in sustainable development.[2] Concern responded by organizing a combination of educational talks and solar light samples in public libraries and schools to provide both students and adults alike the value of the solar technology to families in developing countries.

Why is Clean Energy so Important?

Due to the lack of access to reliable and affordable electricity, many families are forced to use kerosene lamps, candles, coal, charcoal and wood to provide lighting. Many of the poorest communities have no choice but to live in darkness. Those that can afford light or receive kerosene subsidies are still at risk, with naked flames representing a substantial fire risk.

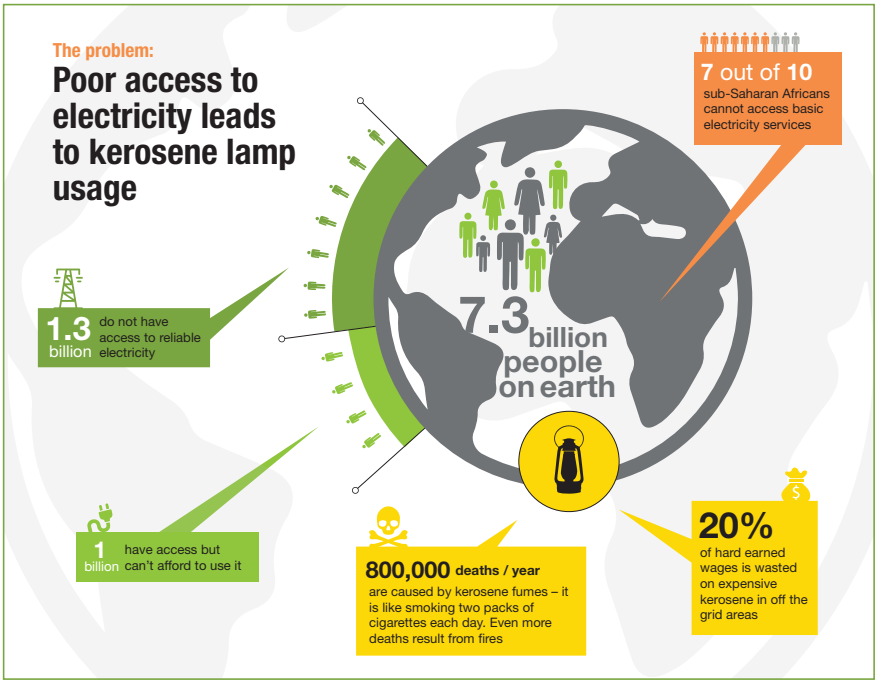
When fires start in tents or in homes made from natural materials they spread quickly and the associated personal injuries and loss of property plunge families deeper into poverty.

More than 800,000 deaths are caused by indoor air pollutants every year.[3] The fumes from a kerosene lamp in a confined area have the same effect as smoking two packets of cigarettes per day. There is strong evidence that exposure to such air pollutants leads to a wide range of child and adult ailments, as well as adverse pregnancy outcomes[4] and other non-health related impacts.

Access to energy strongly correlates with raising people in developing nations out of poverty[5]. When comparing per capita electricity consumption with the Human Development Index (HDI)—a measure of well-being that includes life expectancy, literacy, education, and standard of living—even a small amount of energy can transform lives, and nations[6].

Innovation through partnership

Whilst the provision of sustainable power has been slowly moving into the mainstream of the development agenda, Concern Worldwide and Flexiway Solar Solutions partnered over five years ago as they saw the need for action and recognised the value that each could add. The relationship was initiated through a chance meeting with one of Concern Worldwide's senior officers in Australia.



Flexiway Solar Solutions was subsequently introduced to a wide range of Concern Worldwide staff, including field and desk officers, health experts, logistics and IT departments, and they listened carefully to their ideas regarding the perfect emergency light. The information gleaned served as a blueprint for the *Solar Muscle* light.

This simple product has been distributed by Concern and partners to long term projects in Sierra Leone, Liberia, Kenya and Somalia where recipients have experienced a range of benefits including improved health, savings on kerosene costs and improved education outcomes when lights are used to study at home. Providing access to light for the whole family after dusk is a simple way to make a large difference at relatively low cost.

Concern has also distributed personal lights in large numbers during emergency response in the Philippines and Nepal. The addition of a free light source was met with a very positive response.

The advantage of the solar muscle is that it is compact – measuring 9x9x2.5cm – so easy to ship. It has 12 LED lights and can be used on full or with half these lights illuminated. The solar panel and battery unit are integrated and one hour of charging in sunlight will give one hour of full power solar light or two hours at half-light. It has been shown to charge even in overcast conditions. Another feature is that you can clip the lights together to form a light strip, or they have holes so you can hang them. They are child friendly, weatherproof, shock proof and have a three year lifespan which equates to 1,000 charge cycles. There are many solar lights on the market and normal procurement procedures need to be followed – but these are features which should be considered minimum standards for solar lights used in our programmes.

Case Study from Nepal

Durga Basnet lives with her husband and three daughters in Dolakha, Nepal. Their house cracked after the first earthquake on April 25th 2015 and they moved to a tarpaulin shelter with most of their possessions. Their house collapsed further after the second quake. They are now living under corrugated iron and tarpaulin that was provided by Concern to strengthen part of their house.

Durga Basnet (52)and Radhika Basnet (Durga's daughter), Birkhot VDC, Dolakha District, Nepal. Photo by Alastair Taylor, 2015.

Durga and her family received a Concern/ Flexiway solar light and it is greatly appreciated. When they first moved into the temporary shelter they did not have mains electricity and the light was used every day. Even after the mains electricity has been reconnected, Radhika and her sisters used the solar light to help them study at night because it is brighter than their one small filament light bulb.

Making a difference together

Concern has provided input to the product development roadmap at Flexiway Solar, and a range of new products have been designed which include solar radios, head torches, phone chargers and lamps. We recently supplied Solar Medical 6-Packs (a single pack containing four solar lights and two solar head torches) to support Concern Worldwide's Kenya Midwife Programme and hope to learn more about the impact that light might have in medical settings where nearly half of all mothers and newborns do not receive skilled care during and immediately after birth. Virtually all (99 per cent) newborn deaths occur in low- and middle-income countries, particularly in Africa and South East Asia.[7] The feedback from midwives in Kenya will help guide this new product development.

One key feature of most of Flexiway's solar products which fits with the learning from Concern's programming experience is that they have one function. So they have separate solar lights, separate solar chargers and a separate solar radio. Many other products are multi-function – although this seems like good value, it means that the product is not always used for the purpose it was intended or by the beneficiary it was intended for. For example, Concern programmes have found that solar lights that include phone chargers are often taken by the men of the household to charge their phone and run the solar power down so the women or children who were the intended beneficiary for the light do not get to use it. Our advice is that you buy the product with the function that you need for the programme activity and avoid multi-function products. The logistics team in Dublin are on hand to give further advice.

"Our products are better because of Concern's feedback and insight," acknowledges James Fraser, Flexiway Solar Solutions' Product Development Manager, "and, as solar technology continues to improve, so too will our impact."

References and Content Notes

1. Global-off-Grid Lighting Association, Opinion Towards Kerosene Subsidies, June 2015.
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5. Ibid
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7. World Health Organization, The Partnership for Maternal, Newborn & Child Health, Newborn death and illness, September 2011.

Reflecting on Concern's ICT4D journey

By Ellen Ward

Introduction

In the Concern Worldwide Strategic Plan 2010 – 2015 a focus on technology led to specific goals being set to ensure the best use of the tools available. Specifically, Concern IT committed to:

Maximising the benefits from new and existing technologies using research and information exchange, in order to achieve positive impact for our beneficiaries and to improve operational effectiveness.

This signalled the start of a new journey into ICT4D for Concern. Information Communication Technology for Development (ICT4D) is a term that has evolved over the past decade to describe IT solutions which deliver benefit directly to development or emergency programmes. Concern Worldwide has been actively focused on ICT4D since 2008 and our first ICT4D Strategy was written in 2012. The top five technologies requested by programming staff were 1) Digital Data Gathering (DDG) 2) green energy 3) digital maps 4) a programme participant database 5) mobile technology. We have since delivered projects in all these areas and learned a considerable amount along the way. In addition to learning about the needs of our staff and relevant technology solutions, we have also learned how to design, develop and deliver these solutions.

As an IT project manager moving into ICT4D, I have found a need to adjust and challenge many of the traditional practices and approaches to technologies which work in affluent, connected environments. In this article I will firstly explore some of the assumptions that need to be questioned for effective ICT4D project management.

Secondly, it is important to acknowledge that learning can be apparent in projects that succeed, but also those that appear to fail. To illustrate this I will share a short ICT4D Case Study from Zimbabwe where lessons learned about SMS outnumbered the amount of SMS received by the programme.

Finally, I will highlight a movement amongst ICT4D professionals to establish guidelines and best practice to support our work and improve return on investment and programming outcomes.

A Different Way of Working

At Concern Worldwide ICT4D evolved from a coming together of traditional IT problem solving, programming expertise and advances in technology. However, applying the principles of IT project

management which were developed to suit connected environments proves problematic in a development context. Here are some assumptions that apply to most IT projects, but very few ICT4D projects. A traditional IT Project Manager usually:

- Has access to the end user so a full requirement can be gathered and regular interactions can ensure the solution meets their needs
- Is familiar with the end user environment including societal and governmental influences, climate, connectivity, language and digital literacy
- Can measure success criteria for the project using standard means such as number of users or interactions
- Is kept informed of changes that could affect the project from all involved parties such as service providers or third party contractors
- Hands over the project to a long term owner who can provide infrastructure and support for ongoing use and further development of the solution

In an ICT4D setting, many if not all of these assumptions can be untrue and often become challenges as a result. It becomes essential for strong communication links and trust-based working relationships to form between programme and IT staff so that skills and knowledge can be shared effectively. Sharing learning about successes, failures and unexpected outcomes during projects is also essential in ICT4D and even projects which seem to fail offer valuable learning opportunities.

> ICT4D solutions are of course designed with the end user in mind, but for best outcomes the user should be fully involved throughout the project.

Zimbabwe SMS Case Study

In 2013, Concern ICT4D put out a call for ideas for a sponsored FrontlineSMS[1] solution as part of our investment in innovative uses of technology. The winning idea came from Zimbabwe where staff wanted to leverage the 97 per cent mobile coverage rate and 12 million registered mobile phone users by offering an SMS mechanism for beneficiaries to send complaints or return feedback to Concern via a Complaints Response Mechanism (CRM). The aim was to reach marginalised people who would not otherwise interact with the programme team.

The A4 stickers produced to inform people of the SMS option newly available.

A small budget was provided along with advice on how to implement the SMS solution which ran for 3 months and incorporated advertising the service in prominent places. CRM committees were given a mobile handset, solar charger and SMS credit.

The Zimbabwe Innovations Report[2] highlighted very low uptake of SMS, and none at all from marginalised people which initially suggested that the technology might have been unsuitable. Further investigation highlighted that readiness for SMS was lacking.

Barriers to uptake of SMS for CRM in Zimbabwe were reported to include:

- Low digital literacy with 80 per cent of the rural residents reporting difficulties in using SMS
- Phone credit was generally not available for all networks in the pilot area
- Cost of sending an SMS in some cases more expensive than making a phone call
- Anonymity of messages was considered an issue especially for people needing help to use SMS
- Lack of awareness, with only 23 per cent of the target population having heard about the SMS system

The learning from this inexpensive initiative was considerable and the programme staff actively considered how SMS might be used more effectively in the future:

Concern should have done more research on how to target specific groups like women, men, the elderly, children and less literate people. Concern should have also considered using phone numbers from each of the three mobile network numbers (Econet, NetOne and Telecel) so as to capitalise on promotions that these mobile operators run and minimise on costs to the SMS senders. An option for allowing people to make voice calls, rather than using SMS, would have been more appropriate for the majority of rural residents since most mobile networks have promotions on calls…. Overall, the review found that if managed well and with a few improvements, the SMS system is far better than suggestion boxes[3].

From an ICT4D point of view, this pilot allowed for significant learning with minimal investment and time commitment. The lack of SMS uptake revealed useful information for future use of SMS.

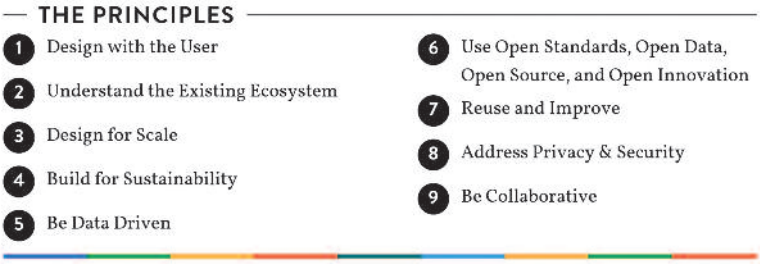
Moving Towards ICT4D Best Practice

It is hard to overestimate the importance of understanding the user requirements for any IT project. ICT4D solutions are of course designed with the end user in mind, but for best outcomes the user should be fully involved throughout the project. A tendency to define the technology **solution** (*rather than the requirement or problem statement*) prior to or during proposal stage, in order to gain vital support from donors, does not always allow space for variations when users are later consulted. However, donors are becoming more receptive to less specificity in solution design while retaining clarity on the problem or challenge the solution is aiming to solve.

For example, the Concern staff working with the Gates Foundation to find innovative solutions to improve maternal and child health outcomes did not know at the outset what role technology would play. Allowing space for this to emerge through user involvement had led to the key challenge of User Centred Design being successfully negotiated by the team who developed a Community Health Nurse on The Go mobile application in Ghana. *"A period of intensive program design preceded the app's development. This design phase allowed stakeholders to meticulously gather information about the nurses and their supervisors and use this data to develop an app suited to the CHN's needs, all the while aspiring to improve motivation and satisfaction in their roles."*[4]

This approach allowed for the realities of the everyday tasks and people involved to be at the centre of the solution design, and supports the principles of User-Centred Design which is fast becoming the single most important element of ICT4D Best Practice. The Principles of Digital Development are a set of guidelines that are starting to become established within ICT4D and they list 'Designing with the User' as the first of their 9 principles[5]. (See below)

These Digital Principles are described as "living guidelines" and aim to adapt as the world, its climate and politics, people and of course technology change. They focus on 'fit-for-purpose' solutions that can be scaled and provide long term benefit, which in turn increases return on technology investment. The principles also support the use of "open data" which is fast becoming a standard requirement from donors like US Aid, and DFID. Concern ICT4D staff agree that standards are helpful in guiding our work and our next ICT4D Strategy will be informed by these principles and the considerable learning we have gained in our first 5 years.



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5. The Principles for Digital Development http://digitalprinciples.org/

What have we learned about mobile money?

By Jenny Swatton and Bernard Gaughan

Introduction

In 2011, Concern Worldwide was part of a study team that researched and published a report entitled 'New Technologies in Cash Transfer Programming and Humanitarian Assistance'; this report presented a review of technology in humanitarian cash and voucher programming and broader implications for humanitarian practice.

Since then the interest in, and use of, electronic and digital technology for social transfers in humanitarian programming has intensified, evident by the scale of work currently being undertaken to consolidate learning; develop guidance and form new strategic partners with the private sector. There are a number of networks (Cash Learning Partnership - CaLP; Better Than Cash Alliance - BTCA; Electronic Cash Transfer Learning Action Network – ELAN) who are also providing forums for stakeholders from all sectors - public, private and not-for profit – to build relationships, share best practice, discuss key issues and ultimately improve how electronic transfers are used for humanitarian objectives.

Concern Worldwide is no exception and there is increasing interest internally to digitalise more of our social transfer programmes. We implement social transfers, through cash and vouchers, in many of our 27 country programmes for a range of objectives (food security, nutrition, access to education, income generation) and have seen first-hand the benefits of electronic payment systems: security of participants and staff; speed of transactions; reduced opportunity for fraud and diversion of funds; cost efficiency. We also believe that electronic payment systems, although not a panacea for financial inclusion, can help support it. However, we continue to face some challenges to implementation. Below we have summarised our experiences of using **mobile money transfers** in Kenya, Malawi and Niger, highlighting key aspects of design and implementation and experiences. It concludes by setting out broader lesson learning and potential discussion points.

MOBILE MONEY

Smith, G. et al (2011) define mobile money transfers as 'any payment or fund that is transferred from one person or organisation's 'mobile wallet' or bank account to another through mobile phones.

Case Study: Malawi

For the past three years Concern Worldwide has been delivering social transfers seasonally, in the form of cash, to vulnerable people facing food insecurity in the district of Mchinji in Malawi. Transfers are part of an integrated INGO response (with Oxfam, Save The Children and GOAL) to food security across a number of districts in Malawi[1]. During the 2013/14 response a total of 81,339 people (14,789 households) were targeted to receive cash transfers across four districts. The value transferred was on average MWK 17,500 (USD $31) per household per month (dependent on market prices). Cash was delivered through Airtel Money e-transfers to individuals' Airtel Money accounts and participating households were provided with mobile phones and SIM cards to facilitate the e-transfer. In Mchinji district, Airtel also brought in, another organisation, FHI 360[2] to conduct training of recipients on the use of mobile phones.

This programme will be extended to include 27,000 households in January 2016.
An independent evaluation of the programme, undertaken and published in 2014 (see Gourlay 2014), found that e-transfers were effective in ensuring recipients received the correct transfer amount on the scheduled day (as reported by 97 per cent of recipients) and the joint procurement, and use of a single cash delivery partner across all districts, increased agency negotiating power. Nonetheless, in terms of cost efficiency (cost per recipient) e-transfers were found not to be the most efficient, although their use was justified based on the secondary benefits it would bring to recipients including improved channels of communication due to increased mobile phone ownership.

The programme also faced a number of other challenges:

- There were a limited number of agents with sufficient liquidity to cash out a significant proportion of project recipients.
- Delays were experienced at cash distribution points due to waiting for cash agents to arrive.
- The complexity of the system did not achieve the objective of maximising the ease of use for recipients, nor did it increase the speed of the process.
- Implementing agencies experienced problems with receiving documentation/verification of transfers from Airtel agents.

In terms of technology, a few technical hitches were reported on cash distribution days but in most cases these could be resolved that day. Problems or missed payments were also reported and followed up by implementing agencies; most problems were linked to faulty SIM cards or in one case a beneficiary having lost the phone before distribution.

Case Study: Niger

Since 2010, Concern Worldwide has also been delivering social transfers, in the form of cash, to households experiencing drought and food crisis in Niger. In the first programme, 10,000 households received assistance in the form of cash for five months during the 'hunger season',

30-year-old Adiya Hatou is taking part in a cash-transfers scheme organised by Concern in the village of Mogheur in Nger's Bambeye Commune, Tahoua, Niger. Photo by Jennifer O'Gorman, 212.

the period before the harvest. Participants received an average of 22,000 CFA (USD $45) per month. The programme was conducted as a randomised control trial[3] (see Aker, et al 2012): one-third of villages received a monthly cash transfer via a mobile money transfer system (called Zap); one-third of villages received a physical cash transfer and the final one-third received a physical cash transfer plus a mobile phone (referred to as the placebo). The mobile money transfer system was developed by mobile phone provider Bhartia Airtel (formerly Zain) and was the first mobile money transfer system of its kind in Niger.

A simple beneficiary registration and ID card printing system was developed by IT and the programme. It enabled efficient management of the cash distributions. This became a key learning exercise within ICT4D as this system has become the basis of beneficiary management systems in Concern.

The study found that mobile phone transfers incurred higher set up costs, particularly as a result of purchasing mobile phones and training recipients in using a mobile phone, though on-going costs were lower than with physical delivery. Recipients were also seen to incur fewer costs. Unsurprisingly, the programme increased mobile phone ownership and frequency of use, though interestingly, increased communication was recorded as being higher amongst recipients who received cash through the mobile money transfer system than those receiving physical transfers.

Recipients in Niger faced similar challenges to those in Malawi especially in relation to cashing out due to low and uneven coverage of Zap agents across different villages, despite efforts to register private kiosk owners and traders.

Concern Worldwide Niger has continued to respond to the seasonal food crisis in Niger through both the transfer of cash and goods in-kind, and up until this year (2015) have continued to use the mobile money transfer system for transferring cash. This year however, the decision was made to revert to physical transfers through a delivery agent – ASUSU, a national micro-finance organisation. Reasons cited for this include the low coverage of Zap agents, the length of time it takes to set up the system each year and ensure targeted recipients are provided with a mobile phone and the costs involved in setting up the system each year for what is a short-term intervention (4-6 months).

Case Study: Kenya

In Kenya, Concern Worldwide has frequently used the M-PESA mobile bank transfer system to deliver cash to recipients affected by multiple emergencies including in response to the post-election violence in 2007 and to price hikes in 2009/2010. The latter, The Korogocho Cash Transfer Initiative, was designed to support households living in the urban settlement of Nairobi in 2009/10 following price hikes that left people unable to meet their basic food needs. The programme delivered KES 1,500 (USD $14) per month cash assistance to 2,400 households over a period of eight months, irrespective of household size. At registration, targeted households are given a SIM card and each month the cash is transferred electronically to the SIM card via M-PESA. Recipients can redeem money at any of the M-PESA agents.

An evaluation of the programme in 2011 (See MacAuslan and Schofield 2011) found that the M-PESA system worked well and that recipients' unanimously preferred this delivery mechanism due to the secrecy and flexibility it offers. The evaluation also noted that technical issues were effectively resolved by the M-PESA team.

Bessie Nikhozi, a project officer for Concern Worldwide's Urban Livelihoods and Social Protection programme, show Irene Adhiambo how to use the "M-Pesa" system on a mobile telephone to receive her first instalment of Concern's cash transfer programme, Korogocho slum, Nairobi. Kenya. Photo by Phil Moore, 2012.

CONTINUED ON PAGE 26 »

TECHNOLOGY TRENDS FOR 2016

There's an App for that…

Whether it be CrowdShake (an app for crowd sourcing seismic activity) to Mobile Disaster Relief (an app for collating data from first responders), there is an app for that. As smart phone usage increases, the scope for innovation does too and locally designed apps will soon become widespread.

Finding veins

This technology works by beaming harmless near-infrared light at your arm. Our veins contain a lot of deoxygenated haemoglobin, and because this is absorbed by infrared light, it creates an image of exactly where your veins are under the skin. It's already used widely in hospitals and pathology clinics around the world to make it easier for patients to have blood taken.

Water Technology

Water is our planet's most vital resource. A number of new methods to provide drinkable water are being invested in, such as nanotech filtration, seawater desalination, and filtration membranes.

Satellite phones

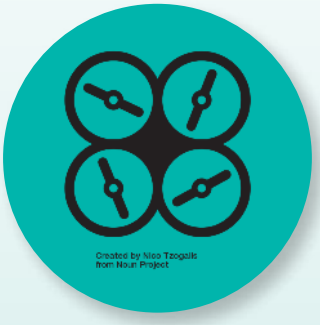
SatCase is a revolutionary device that transforms the common smartphone into a sophisticated satellite phone. By inserting a smartphone into SatCase, the result is users can stay in touch with others, no matter where they are in the world.

By Fiona Savage

Concern Worldwide is always looking for new, innovative tools to improve how we can deliver services to our staff and beneficiaries. Here are some of the recent developments in technology that we could all be using in the years to come.

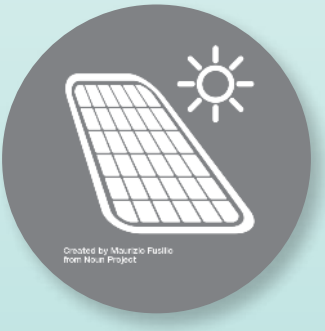
Virtual reality tools

Virtual reality is an area where major developments are being made. The UN already sees virtual reality-based trainingsolutions as affordable and effective tools for reducing poverty, increasing and developing industrial skills in developing countries. Amnesty International has used Syria bombing simulations for on-street fundraising, and to allow people to experience the reality of daily life for many beneficiaries.



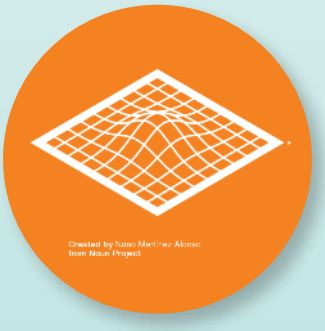
Drones

Farmers are one of the first groups to understand the potential of new ideas and try them out for themselves. Irish farmers have started using drones to herd sheep. Drones fitted with cameras can provide us with a visual landscape to help with distributions, access to remote regions and even delivering emergency equipment to inaccessible locations.



Solar energy from glass

Transparent solar concentrator – this could turn any window or sheet of glass into a solar panel; your phone could charge itself from its own screen



3D mapping

Soon we will be able to use data to build maps which jump out of the page or screen and tell a vivid story of the places in which we work. Watch this space.

HOW TO SEND CASH

- Register for M-PESA at an M-PESA Agent
- Buy M-PESA value by depositing cash
- You and your Agent will receive SMS confirming the transfer
- On your M-PESA phone menu, select "Send Money"
- Enter recipient's phone number, the amount and your PIN
- You and the recipient will receive SMS confirming the transfer

HOW TO GET CASH

- Give your phone number and show your ID / passport to agent
- Go to your M-PESA menu, select Withdraw money
- Enter the Agent number, the amount and your PIN
- You and your Agent will receive an SMS confirming the transfer
- The Agent will then give you the cashThe main steps for a beneficiary to use mobile money.

"

Money transfer initiatives tend to unearth a plethora of questions which implementers must consider.

Concluding thoughts

These three case studies highlight useful lessons on the use of mobile money transfers:

- The need to train people on the use of mobile phones and the importance of security measures, i.e. keeping PIN numbers secure and follow up on training.
- The need to ensure adequate coverage and liquidity of cash agents.
- Where setting up cash distribution points, the need to ensure that these are within an easily accessible distance to all recipients and never continue beyond the time when recipients become unable to reach home before nightfall.
- The need to include conditions of good and robust financial reconciliation in partnership agreements.
- The need to include potential problems that might occur during the e-transfer, and the appropriate measures to resolve, in the risk analysis and contingency plan.

Money transfer initiatives tend to unearth a plethora of questions which implementers must consider, namely: Which is the optimum delivery mechanism? Who should we be partnering with? How can we better protect and manage recipient data? These questions are not unique to Concern Worldwide and are reflected in on-going global discussions (See ELAN 2015) nor are they unique to electronic payment systems. They are relevant to any social transfer delivery mechanism.

In conclusion, there are a variety of delivery mechanisms that can be used to deliver cash and advantages and disadvantages of each. In the end there is likely to be a trade-off based on what is: **Appropriate** – it meets the objective; **Achievable** – there are adequate resources to facilitate transfers; **Adequate** – is effective at reaching or accessible to recipients; **Acceptable** – there is popular support for it; **Affordable** – is cost-efficient, and finally it **Adds-value** – the delivery mechanism provides secondary benefits to recipients[4]. It is critical that all those who may be responsible for the implementation of social transfer programmes (logistics, finance, IT) are involved in their design.

Finally, it is also important to remember that the delivery mechanism is only one aspect of a social transfer programme. Cash (and vouchers) is a tool, or modality, for transferring resources to targeted beneficiaries to achieve a certain objective and delivery mechanisms are the channel through which we make these transfers. Equally important and as challenging is how we monitor whether the ultimate objective for transferring resources is being met.

References and Content Notes

1. The number of districts varies each year depending on the findings of the Government's annual vulnerability assessment.
2. FHI 360 is a US-based NGO dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. FHI 360 serves more than 70 countries as well as all US states and territories (www.fhi360.org)
3. A randomised control trial refers to a study whereby participants are randomly assigned to different study groups, in this instance those receiving treatment (programme beneficiaries) and those who are not (non-beneficiaries). An RCT can help to identify impacts which are directly attributable to the programme rather than external factors.
4. Adapted from the 6 A's framework developed by Slater, R. (forthcoming)

Aker, J., Boumnijel, R., McClelland, A. and Tierney, N. (2012) Zap it to Me: The Impacts of a Mobile Cash Transfer Program http://sites.tufts.edu/jennyaker/files/2010/02/Zap_it_to_Me_26feb2012.pdf

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The Digital Divide

By Barry Roche

In some places it is relatively narrow, in others it is a yawning chasm; however wide the gap, it is pervasive worldwide. That gap is access to technology and communications, known as the digital divide. Closing the gap is critical to both social and economic progress, and to stemming inequalities.

Over the last 20 years, technology has transformed the face of the planet. It's easy to forget that we are living in an era of extraordinarily rapid technological change. We take the ability to download a movie onto a tablet for granted but a decade ago this would have been unheard of.

The digital divide is thus: those with access to technology and those without.

This gap has its own divisions, it might be no access versus slow access versus high-speed internet access, having a PC and not having a PC, or the latest smartphone and a very basic model.

Why does this divide even matter? What difference does it make? There are a multitude of aspects to this question but let's focus on just two: the social and the economic.

The capacity for economic and social transformation

As technology has developed, so have the services available to us. Services have grown from the relatively unsophisticated, such as text messages to videoconferencing. Ten years ago, you could email a job application to a potential employer; now the entire recruitment process can take place online. There are online universities, online diagnostics, there is hardly a realm of our social environment which has remained untouched during the two decades.

Education, medicine and civic engagement have each been dramatically transformed and will continue to be transformed. The Arab Spring would not have been possible without mobile technology, similarly It is now possible to access online courses from universities around the globe without ever leaving your house - but only if you are on the right side of the digital divide.

At the current rate of progress we can barely conceive what the next 20 years will bring and how they will change the lives of those connected to these social services and movements.

Economically, access to IT is critical. According to Colin Scott from Berkeley University a ten per cent increase in broadband penetration is correlated with a 1.35 per cent increase in GDP for developing

countries[1]. Investment in technology will pay for itself through economic growth and job creation. Significantly, that growth tends to occur at the lower end of the spectrum in small and medium size enterprises.

How big is the divide?

Statistics shine a light on the nature of the problem. Even though internet use in Africa has grown over 5,000 per cent since the year 2000, only 7 per cent of the population currently has access to the internet. Mobile phone penetration is much higher, at 72 per cent, but only 18 per cent of mobile phones are smart phones[2].

In nine of the poorest countries of the world, broadband costs 200 per cent of the average monthly income.[3] Thus, affordability, and not availability, is the primary issue.

The Digital Divide and Women

There is a distinct gender disparity within the digital divide, particularly in developing countries. For example, only 44 per cent of Bangladeshi women own mobile phones, compared with 72 per cent of Bangladeshi men. Consequently, 33 per cent of Bangladeshi men have used mobile money compared to only 13 per cent of Bangladeshi women[4]. Bangladesh is not an outlier, but rather is representative of developing countries. In low- and middle-income countries, a woman is 21 per cent less likely to own a mobile phone than a man. Men stand on one side of the digital divide and women on the other.

Bridging that divide could kick-start a social revolution which could have a profound impact on women and girls.

What would it mean if the cost of training nurses was reduced dramatically because of access to online education? What would be the impact of an effectively run SMS campaign on gender based violence? What would it mean to have to have a technology-based programme on nutrition? Technology has the power to expand the reach and effectiveness of a programme.

Reducing the technology gap in favour of women could also address income disparities. Economically empowered women could drive economic growth.

When more women are educated, child mortality decreases and their children are better educated. When more women receive knowledge and access to health care, their children are healthier. When more women work, economies grow[5].

Fundamentally this is not just a matter of fairness and equality, it represents a huge missed opportunity.

> “Closing the digital divide will allow developing countries to make a quantum leap in their development, both socially and economically

The way forward

Bridging the gap is a work in progress. It is arguable that there will always be a digital divide as long as we live in an unequal world. On a macro level, there have been enormous improvements in infrastructure, especially in Africa over the last decade. Access to fibre-optic technology has given economies the chance to leap-frog older technologies in favour of newer and more flexible ones. But that is only one part of a very big picture. Fibre-optic cable will not necessarily produce tangible gains on the ground; it allows the price of broadband to fall but it needs to be accompanied by a massive improvement in the supply of training and appropriate technology. That in turn can drive real progress at a micro level.

For example, Concern in conjunction with Nethope was able to provide fibre-optic connectivity to one of our offices in Buchanan, Liberia. Connectivity was transformed from a slow and problematic connection to a consistently high speed connection. This in turn facilitated functioning Skype calls and direct support for digital mapping in response to the Ebola outbreak. Such reliable connectivity enables critical information to be available at the right time in the right place.

Many might say that if a family can't afford bread or medicine then surely they are not in need of a mobile phone or an internet connection. That is a perfectly reasonable argument. However, the United Nations has recognised the importance of closing the digital divide. The aim of target 9.c of the new and universal Sustainable Development Goals is to "significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020".[6] This commitment underscores the importance of equal access to technology and connectivity.

In the long term, denial of access will only perpetuate the cycle of poverty. Those without access will remain poor and unable to take the next steps to lifting themselves out of poverty. As Peter Drucker said: "Today knowledge is power, it controls access to opportunity and advancement". The internet is the heart of that knowledge and opportunity.

Closing the digital divide will allow developing countries to make a quantum leap in their development, both socially and economically. It will allow countries to diversify their economic base, enable community and individual development and profoundly alter the social landscape.

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Putting GIS on the Map

By Jenny DiMiceli, Ellen Ward, and Herby Cyprien

Introduction

Geographic Information Systems (GIS) is a technological field that incorporates geographical features with tabular data in order to map, analyse, and assess real-world problems[1].

GIS is a powerful spatial and statistical analysis tool that can be used to visualize, question, analyse, and interpret data to understand relationships, patterns, and trends[2]. GIS technology helps NGO's make the most out of limited resources to impact the most people. As many projects occur in challenging locations, such as fragile states with poor infrastructure, the use of spatial data and knowledge can supplement, reduce and even take the place of on the ground activities. GIS can be leveraged to remotely support programmes, thereby reducing travel, a benefit for both cost and environmental reasons. In this article we discuss the potential benefits that GIS technology can bring to Concern, by drawing on a specific case study, and we suggest a road map for GIS within Concern for the coming years.

What can maps show us?

Mapping can enrich many aspects of the work undertaken by Concern. From emergency response, climate smart agriculture, and water, sanitation and hygiene programmes, maps are being used to serve a wide range of needs. For example, the work we do in the area of Conservation Agriculture could benefit from maps of soil types and crop yields, as well as analyses of rainwater harvesting techniques.

Spatial analysis has been used by analysts in Kenya to determine the percentage of women within walking distance to their local hospital and ways to optimize health coverage[3]. In preparation for emergencies, data has helped show where work has taken place and where more work is needed. GIS tools helped Concern Liberia effectively manage, plan and coordinate their efforts with other teams in response to the Ebola crisis.

In December 2014, Concern Senior Management Team (SMT) reviewed a GIS Business Case which highlighted the benefits and costs associated with using ESRI software for up to 150 Concern staff to create, view and analyse maps and data. Since SMT approval, the Environmental Systems Research Institute (ESRI) is providing technical support and software to suit the needs of our growing virtual GIS teams.

Making maps that work

While GIS is a powerful instrument, there are multiple considerations and challenges to using it effectively. First, GIS is a complex technology, and there are a limited number of people trained in it

within Concern. In order for country teams to utilise GIS, training and education will play a vital role in developing skills. Funding for GIS needs to be considered in the project planning stages and allocated accordingly. Moreover, data quality largely determines whether GIS mapping and analysis will be successful. Whilst it is not the case that every dataset is suitable for mapping, we are at a tipping point in improving our skills in data collection and analysis, and GIS offers one way to analyse and visualise data that can be used to help us in our work.

How Concern in Haiti have adopted GIS

The earthquake that struck Haiti on 12 January 2010 was by all means a 'mega disaster'. Some 300,000 people were killed, thousands more were injured, and more over 2 million people lost their homes. Five years on, despite the combined efforts of the government and international partners, a number of Internal Displacement Person's (IDP) camps still remain open with families in urgent need of relocation. Concern's **Return to Neighbourhoods programmes (RTN**) has helped relocate over 8,233 displaced families through rental cash grant approach[4].

An innovative part of the RTN programme was the **Digital Data Gathering** (DDG) system which allowed the team to easily track and follow up on programme participants, making this programme one of the strongest in terms of monitoring and evaluation (M&E) in Concern Haiti. As M&E Officer of the RTN programme, one of the authors (Herby Cyprien) saw first-hand the benefits of using DDG; however, he always felt that more could be done in terms of mapping.

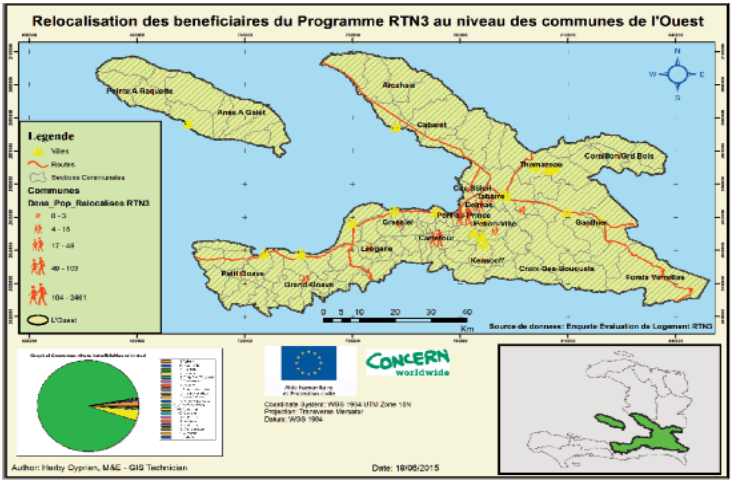
It was with the above in mind that in May of this year, Herby was selected to take part in a GIS workshop in the capital of Haiti, Port-au-Prince. The training ran for five days and focused on the advantages GIS offers for mapping, analysis, database management and editing. Herby found the training hugely beneficial. He is currently busy putting his newly acquired skills to use; see next page for one of the maps he has produced. Herby intends to pass on his new skills to other Concern colleagues in Haiti.

> "To make GIS accessible to more staff, we are designing a method to request assistance in creating maps or supporting staff to do so.

Mapping our GIS Path

In 2015 our small GIS team in Dublin, which consists of one full-time GIS Analyst and a part time ICT4D Coordinator, will focus on GIS capacity building and GIS processes.

To assist with staff development, we are currently putting together a training plan for staff who lack the means or budget to undergo classroom training. The aim of this plan is to create training, both for beginners and those wishing to learn advanced skills, using the wealth of existing online materials. This will be supplemented with custom lessons tailored to Concern staff. We are exploring the possibility of creating e-learning modules to host and deliver this training.



An Return to Neighbourhoods map produced using ArcGIS by Herby Cyprien in Haiti

To make GIS accessible to more staff, we are designing a method to request assistance in creating maps or supporting staff to do so. We are looking at the best ways to connect people across diverse locations and provide an online space for sharing maps and data; one that takes into account the often disconnected environments in which staff work.

In November 2015 a full day session on GIS will be held at the NetHope Summit, where 43 member NGOs can share experiences of using GIS and learn more about the benefits to their staff and programmes. In 2016 we will begin drafting the first GIS Strategy for Concern Worldwide based on our learning from the project so far, technical advice from the makers of our GIS software and a peer review of how other organisations use GIS.

Much in the way that the DDG project became established over a few years, with clear guidelines created to ensure quality outputs, our GIS function will build as we engage with more staff and join the dots between data collection, data analysis and data visualisation. In this way, we can firmly put GIS on the map at Concern.

Concern staff who wish to use ArcGIS should make a request via their Country Management Team before emailing mapping@concern.net

References and Content Notes

1. More information on GIS is available here (GIS lounge. http://www.gislounge.com/what-is-gis/)
2. More information on GIS is available here (ESRI http://www.esri.com/what-is-gis)
3. More information on the Kenya intervention can be found in Issue 12 of Knowledge Matters. "Placing Emergency Obstetric and Newborn Care Resources Optimally in Kenya". Katie Walker and Edwin Mbugua, Knowledge Matters, March 2015.
4. Numerous evaluations of the RTN programme can be found on Knowledge Exchange.

The role of Digital Data in building Resilient Communities

By Dom Hunt

Introduction and background

The Community Resilience Indexing System (CRIS) collates scores for a set of indicators to measure community resilience. Resilience[1] is a complex concept that requires interventions in multiple sectors. Ultimately, the best way to measure resilience is to wait for a disaster to happen and see how a community copes with it, and bounces back afterwards, hopefully better than before. However, we usually don't have the time to wait for a disaster – we need to measure as we go along so we can see whether we are doing the right thing or not.

The CRIS uses proxy indicators, meaning things that we think are pre-requisites for resilience, which are termed the characteristics of community resilience. The characteristics are determined based on the 6 livelihoods capitals (social, political, human, physical, financial and natural). Characteristics are identified at the community and national level, in recognition that there are processes that happen from the wider context (such as national governance) that have an impact on resilience at the community level.

For each characteristic indicator(s) have been identified which are easy to measure. Each one is placed on a scale from 1 to 5, where 1 is the worst case scenario and 5 is the best. For example, one indicator would be that a full risk analysis has been done in the community. 1 would imply that no risk analysis has done, 5 would imply that a 'perfect' risk analysis has been done, and the points 2 to 4 refer to the quality of the risk analysis that has been done; where a 2 would mean that a very poor quality risk analysis has been done, and so on.

Determining the scores per indicator requires a community conversation with a representative group from a community, who would assign scores for each indicator. Determining the CRI is a simple matter of averaging all the indicators together in each capital group, which in turn are averaged together for a community or national level score, and these two scores are in turn averaged together for the final community resilience index.

Digital data and CRIS

While the main methodology – community conversations[2] – is an inherently analogue process, the outputs are actually a series of numbers – the scores. The averaging process, to determine the index, is relatively straight forward, mathematically speaking, but nonetheless it is really easy to make mistakes. Small mistakes can seriously change the final index and influence how we analyse the scores and make decisions on them. One of the most important reasons for digitising the tool is to take away the human error element in the data manipulation by automating it.

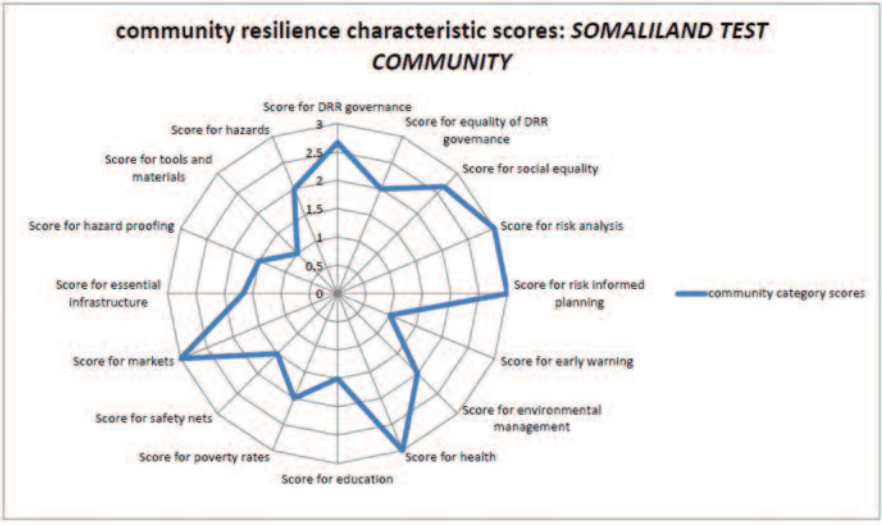
Training for a sample of CRIS facilitators is planned for early 2016 and will include: understanding the CRIS methodology, how to run community meetings, and how to capture the data using Digital Data Gathering (DDG). More details on DDG can found in the article *'How Digital Data Gathering can improve Monitoring and Evaluation Practice'* in this edition of Knowledge Matters.

> Training for a sample of CRIS facilitators is planned for early 2016.

The Results

Once the scores are collected, the CRIS needs a 'calculate index' option to generate a report showing the scores per characteristic and livelihood capital, at both the national and community levels, and the community resilience index. DDG will provide data in the raw format (Excel or .csv file) and this information can then be portrayed using charts or graphs such as the spider diagram below.

Figure 1: Community Resilience Characteristic Scores



The analysis of this information should be a simple process – the lower scores indicate where weaknesses are and the higher scores where there are strengths. We then focus our programming on strengthening the characteristics that are shown to be the weaker ones. Through time we should see that the scores rise, and the points on the spider graph move further from the centre, which in turn is evidence that our programming is achieving success.

Added Features

Mapping CRIS in all Concern Communities

DDG will automatically capture a GPS coordinate for each survey captured (where approved locally) and this data can be used to map scores across regions, countries and ultimately all of our locations of operation. Once CRIS scores are being collected from all Concern programme villages, we will immediately be able to see which communities are most vulnerable, or most resilient, and can start conversations about why this is.

Photographic Evidence

Capturing photographic evidence of the work done and work needed is another key feature of a digitalised CRIS model. For example, a notice board showing flood warning information and emergency meeting points in one community can be photographed as an idea for another community to copy. These photographs can also be mapped to show location and provide context.

Looking ahead

The cross-functional CRIS team decided in early 2015 to focus on collecting data in 2 countries primarily. Concern Worldwide teams in Chad and Sudan working on the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme will test the indicators and the methodology. Feedback will be used to consider further how the results can be displayed, and for working towards a full CRIS solution that can be scaled up in the future to reach as many locations as possible. So keep listening for updates to find out how you can help us build community resilience and increase CRIS scores around the globe. Get in touch if you want to find more about CRIS.

References and Content Notes

1. The paper 'Confronting Crisis: Transforming lives through improved resilience' gives the reader an insight into Concern's resilience work. The paper is available on Knowledge Exchange.
2. More details about Community Conversations can be found on Knowledge Exchange.

Can technology contribute to positive development outcomes?

By Kai Matturi

Introduction

Concern has made significant commitments to the use of technology in its work to reduce poverty and suffering. This is evident in the explicit focus on technology in the organisation's current strategic plan and its investment in Information Technology (IT) hardware, software and skilled staff.

This strategic decision to embrace technology is predicated on positive experiences with technology projects to date. Despite reservations by some development researchers and practitioners, it is Concern's experience that technology can and does contribute to positive development outcomes when approached and utilised in the right way.

In this article I will present the perspectives of those who are not convinced of the role of technology in development, and look at two positive examples of how technology has helped Concern's development and emergency programmes.

Dissenting views

Not everyone is convinced that technology is useful or effective in development and emergency interventions. Torero and von Braun (2006) found the *'variety of views about technology reveals that their role in development is unclear, especially without convincing evidence of their impact – little research has been conducted on the direct and indirect links between technology and poverty reduction.'* They conclude by stating that technology can offer an opportunity but it is not a panacea. This is a sentiment that resonates with Concern's own experience with Digital Data Gathering (DDG). DDG technology can help us do things quicker and more efficiently, but if there are fundamental gaps in knowledge relating to survey design or data analysis then technology does not make these problems disappear.

Other studies reviewed by Torero and von Braun expressed scepticism of the beneficial effects of technology in development and emergency interventions, arguing that access to technology depends on income, education and resources. They argue that socioeconomic development contributes to a greater use of technology rather than the reverse. A study by Ndung'u and Waema (2011) found that the use of internet and mobile phones led to *both* positive and negative development outcomes.

Arunachalam (2002) asserts the focus should shift from bridging the digital divide to poverty alleviation. Others maintain that using technology as an engine of growth is complex (Bollou and Ngwenyama, 2008), and that development is not merely a matter of technology but needs a sound political economy perspective along with the political will to prioritise development problems (Nulens and van Audenhove, 1999).

Therefore, for the potential benefits of technology to be effective in reducing poverty, many pre-requisites need to be put in place, including ways to reduce access gaps and capacity building to build up complementary skills. Technology may have a role to play in boosting developing outcomes, but it should be seen as a potentially helpful tool and not a panacea.

> “”
> It seems probable that the impact of technology will be determined by the context in which a particular technology is deployed, the preparedness of the users, and the opportunities that exist for their application.

Positive examples

Despite the reservations of these authors, it is Concern’s experience that technology can and has been useful in contributing to positive development outcomes. In the rest of this article I will discuss briefly two positive examples that have emerged from Concern’s work in Malawi.

Using technology to deliver social protection

Concern’s use of technology to deliver social protection interventions in Malawi has been described as transformative and innovative by one of the leading social protection thinkers (Devereux & Vincent, 2010). In 2005/6 Concern designed and delivered an exceptionally innovative emergency cash-transfer programme called the Food and Cash Transfers Project (FACT). The FACT project was unusual in two respects: first, that it transferred a package of food plus cash to ensure that both food and non-food needs were met, and second because the size of the cash component was adjusted monthly in line with food prices, thereby protecting recipients against the food-price inflation that is typically observed in rural African markets during the annual ‘hungry season’.

An external evaluation of FACT commended its innovative design features but recommended, among other things, that ‘(1) more efficient ways of handling cash are explored, such as sub-contracting or automation (i.e. ATM or “smart cards”); (2) more attention is paid to the potential security risks, especially where the delivery of large sums of cash are involved’ (Devereux et al. 2006: vii). These recommendations were adopted in the subsequent project that was implemented in 2006/7.

Leveraging mobile technology to reduce barriers to maternal, newborn and child health care

The second positive example is Chipatala cha pa Foni (Health Centre by Phone) which is a maternal, newborn and child health (MNCH) mobile health project implemented from 2011 to 2013 implemented in Malawi. This was designed to help bridge the divide between communities and life-saving health information and services by providing pregnant women and caregivers of young children with reliable means of accessing MNCH information and services.

This consisted of two technology components: a toll-free hotline offering protocol-based health information, advice and referrals, as well as a personalized mobile messaging service delivering automated tips and reminders via SMS text or voicemail to pregnant women, guardians of young children and women of childbearing age (Crawford et al. 2014). Community volunteers, trained and provided with phones, conducted community mobilisation in the intervention sites and facilitated access to services to those without phones (IKI 2013).

A review of this project noted that it 'has demonstrated that mobile health can work to improve newborn and child health even in low resource settings… there is major potential for reductions in newborn and child morbidity and mortality' (Fosto, et al, 2015:1679).

Conclusion

To sum up, there is a rapidly expanding literature that has contributed to a better understanding of the potential impact of technology on development projects. Concern's work in Malawi is a good example of positive results at the micro level and it would appear that technology can contribute to positive development outcomes. However, technology is not a cure-all. It seems probable that the impact of technology will be determined by the context in which a particular technology is deployed, the preparedness of the users, and the opportunities that exist for their application.

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Futureproofing Information Technology at Concern

By Vincent Richardson

Technology has changed the way Concern engages and interacts with people. Twenty years ago, communications with the field was a matter of faxes at best, and more often mail couriers. An exchange of information could literally take weeks to complete.

Today the landscape is very different. We use email and Skype to communicate with our people in some of the most remote and austere locations. We use donor relationship management and analytical software as well as social media to enhance engagement with our donors as well as the public at large. More recently we're using technology to improve how we interact with, and measure our interactions with, our programme participants.

We know that for the next strategic plan to be a success, our operating ecosystem needs to continue to evolve. Underpinning this is our ability to capture the right data and have access to the right information. Although we've made great strides in connecting Concern staff and offices around the world, we're still not able to provide access to most of our systems to our people in the field. The reasons for this are twofold; reliable connectivity is still mixed and some of our systems and information is located at our office in Dublin.

A theme central to the next ICT strategic plan will be the need to work with data more effectively. Much has been written about 'big data' and as a term it's very much over used. The term 'right data' is less used but it is a far better term to describe what businesses need day-to-day. If income is the lifeblood of a business, business intelligence that yields useful information is the oxygen that feeds it. The right data is at its most powerful when the right analytic tools are available to sift through it, and when there are people who know what questions to ask. More simply put, for our systems to be 'fit for purpose' they must be available and accessible with the right information at the right time.

Of course, this is easier said than done. Currently, our core business systems such as finance and accounting and human resource management are hosted centrally in our headquarters. Given how and where we work, we've struggled to provide access to some of our systems to our colleagues overseas. It should be noted that connecting to a system in Dublin from a country, even with reasonable bandwidth, will always be problematic. To overcome this challenge for Finance & Accounting we have set up separate instances systems in each country. There is however a plan underway to consolidate this system. For other lines of business – human resources, logistics,

relationship management etc. – there are no standard set of tools for our colleagues in the field to use. Today Excel might be sufficient, but is it right?

> **A theme central to the next ICT strategic plan will be the need to work with data more effectively.**

With advances in cloud computing, we can dramatically change how we approach this challenge. Moving from a multiple systems/ database approach to a single cloud-based system will help us:

- Manage the overlap or duplication of systems
- Unify and simplify processes across department and countries
- Allow the organisation collaborate on work more efficiently and effectively
- Improve accessibility – even to those with limited internet access

There will of course be a different set of costs involved in moving from our current operating model, however I believe this approach is essential to support our proposed growth in the coming years. It should be said that the relationships we've built up with other organisations who've found themselves in a similar position will help us glean great learning from their respective journeys.

As we enter a new strategic term, Concern is at a very interesting nexus. With the possibility of mergers and a move into more fragile regions, we need to ensure we're providing all staff with the right tools and the right data regardless of their location. We are already in possession of some really useful and progressive tools and have access to new generation technologies to better support our work – and achieve our strategic goals - in the coming years and beyond.

Kieran McConville uses solar power and emergency equipment to send video footage from Carikot, Dolokha district, Nepal after the second earthquake on 12 may 2015. Photographer: Crystal Wells

French-language abstracts

Comment la Collecte de données numériques peut améliorer les pratiques en matière d'évaluation et de suivi

Par Ciaran Walsh, Aine Magee, et Kai Matturi

En vue d'améliorer les données quantitatives de ses enquêtes, ces dernières années, Concern a eu recours à la Collecte de données numériques (Digital Data Gathering – DDG –). La DDG a d'abord fait l'objet d'une phase pilote au Malawi en 2011, en tant que méthode de collecte et de gestion plus précise des données du Programme d'agriculture de conservation financé par Accenture. La DDG a ensuite été déployée à plus grande échelle, afin qu'elle soit utilisée dans presque tous les pays où nos programmes sont mis en œuvre, et ce dans tous les secteurs. Une équipe dédiée à cette question, pluridisciplinaire, est maintenant basée à Dublin (Ciarán Walsh – DDG Project Lead [Chef de projet DDG] & Gretta Fitzgerald – DDG Survey Adviser [Conseillère vis-à-vis des enquêtes réalisées dans le cadre de la DDG]). Le reste du présent article consiste en une exploration des apports de la DDG dans les pratiques de surveillance et d'évaluation de Concern. L'article, dans sa conclusion, fera part au lecteur de quelques réflexions sur la trajectoire que suivra la DDG dans le futur, au sein de Concern.

Ce qui rend la technologie importante pour les ONG

Par Lauren Woodman

Pendant 20 ans au moins, la façon dont les Technologies de l'information et de la communication (TIC) peuvent être efficacement appliquées au travail mené dans le secteur de l'humanitaire et du développement a fait l'objet d'intenses débats. Les gains que ces technologies ont générés en termes de productivité, d'échelle de déploiement et d'impact ont été réellement considérables, et plusieurs de ces avancées ont des implications qui pourraient améliorer la vie de plusieurs millions d'autres personnes. Pour des ONG comme Concern, qui travaille dans certains des environnements les plus éprouvants au monde, pouvoir tirer parti des bénéfices des TIC peut offrir d'énormes avantages.

Mettre en lumière les pays en voie de développement

Par Nicole Malick et Ellen Ward

Selon estimation, plus d'1,3 milliard de personnes n'ont pas accès à un approvisionnement fiable en électricité. Un autre milliard de gens ont accès à un approvisionnement en électricité, mais ne peuvent pas se le permettre, ou bien ne disposent pas de ressources en énergie suffisantes pour faire fonctionner des équipements de base. Concern Worldwide et Flexiway Solar Solutions, une filiale de NRS International, (concepteur, fabriquant et distributeur de fournitures de secours de première nécessité, de produits de santé publique et de solutions d'énergie solaire), a ouvert la voie vers un avenir meilleur pour de nombreuses personnes, en permettant aux communautés en développement d'accéder à des solutions énergétiques ou d'éclairage rentables, adaptées aux motifs pour lesquels les personnes les utilisent. Le présent article expose les expériences et enseignements que ce partenariat a permis de faire émerger.

Réflexions sur le parcours de Concern en matière de TIC4D

Par Ellen Ward

En tant que chef de projet dans le domaine des technologies de l'information et de la communication faisant une première incursion dans celui des Technologies de l'information et de la communication pour le développement (TIC4D), j'ai éprouvé le besoin de m'adapter et de remettre en question de nombreuses pratiques et approches traditionnelles vis-à-vis de technologies fonctionnant dans des environnements prospères et connectés à d'autres moyens technologiques. Dans le présent article, je vais tout d'abord exposer certaines des notions préconçues qui doivent être remises en question pour permettre une gestion efficace de projets incluant des TIC4D.

Deuxièmement, il est important de reconnaître que des apprentissages peuvent se refléter dans des projets couronnés de succès, mais également dans ceux qui paraissent ne pas avoir abouti. En guise d'illustration, je vais partager une courte étude de cas du Zimbabwe sur les TIC4D, où les enseignements tirés des SMS surpassent la quantité de SMS reçus par le programme.

Finalement, je vais attirer l'attention sur un mouvement chez les professionnels des TIC4D, qui vise à établir des directives et des bonnes pratiques de soutien dans notre travail et qui vise également à améliorer le retour sur les investissements effectués, ainsi que les résultats du programme.

Qu'avons-nous appris sur les transferts d'argent par appareils mobiles ?

Par Jenny Swatton et Bernard Gaughan

Au sein de Concern, la numérisation de nos programmes de transferts sociaux suscite de plus en plus d'intérêt. Nous mettons en place des transferts sociaux, par le biais d'argent liquide et de coupons, dans plusieurs des 27 pays de nos programmes, pour un large éventail d'objectifs (sécurité alimentaire, nutrition, accès à l'éducation, création de revenus), et avons été les témoins privilégiés des bénéfices des systèmes de paiement électroniques : sécurité des participants et des membres du personnel ; vitesse des transactions ; réduction des opportunités de fraude et de détournements de fonds ; rentabilité. Nous croyons également que les systèmes de paiement électroniques, bien qu'ils ne constituent pas un remède miracle pour permettre l'inclusion financière, peuvent y contribuer et y apporter un soutien. Cependant, nous continuons de faire face à certains défis de mise en œuvre. Ci-dessous, nous avons fait un résumé de nos expériences d'utilisation des transferts d'argent par appareils mobiles au Kenya, au Malawi et au Niger, en soulignant des aspects-clés en matière de conception, de mise en œuvre et d'expérience. La conclusion de l'article s'attache à détailler les enseignements tirés, sur un plan plus global, ainsi que de potentiels éléments de débats.

La fracture numérique

Par Barry Roche

Dans certains endroits, cette fracture est relativement bénigne, dans d'autres, c'est un gouffre béant ; quelle que soit son ampleur, elle est répandue dans le monde entier. Ce vide, c'est l'accès à la technologie et aux moyens de communication, connu sous le nom de fracture numérique. Combler ce vide est crucial, à la fois pour le progrès économique et social et des inégalités qui en découlent.

Au cours des 20 dernières années, la technologie a changé la face du monde. Il est facile d'oublier que nous vivons dans une ère de changements technologiques extraordinairement rapides. Nous prenons pour acquise la capacité de télécharger un film sur une tablette, mais il y une dizaine d'années, cela aurait été impensable.

Ainsi est la fracture numérique : ceux qui ont accès à la technologie, et ceux qui n'y ont pas accès.

Ce vide a des divisions qui lui sont propres, qui peuvent par exemple être : pas d'accès à Internet vs.accès lent à Internet, vs.accès Internet haut-débit, disposer d'un ordinateur individuel (PC) vs. ne pas disposer d'un PC, ou le tout dernier smartphone et un modèle très basique.

En quoi cette fracture a-t-elle de l'importance ? Que change-t-elle ? Il y a une multitude d'aspects liés à cette question, mais concentrons-nous seulement sur deux d'entre eux : l'aspect social et l'aspect économique.

Cartographier les SIG

Par Jenny DiMiceli, Ellen Ward, et Herby Cyprien

Les systèmes d'informations géographiques (SIG) sont un domaine technologique qui inclut des caractéristiques géographiques avec des données tabulaires de façon à cartographier, analyser, et évaluer des problèmes du monde réel. Les SIG constituent un puissant outil d'analyse spatiale et statistique qui peut être utilisé pour la visualisation, le questionnement, l'analyse et l'interprétation de données pour comprendre des relations, des modèles, des tendances. La technologie SIG aide les ONG à tirer le meilleur parti de nos ressources limitées pour avoir un impact auprès du plus grand nombre possible de gens. Étant donné que beaucoup de nos projets sont mis en œuvre dans des lieux présentant des défis, tels que des états fragiles dont l'infrastructure comporte beaucoup de manques, l'utilisation de données et de connaissances spatiales peut apporter des informations supplémentaires, réduire le nombre d'activités sur le terrain, et même les remplacer. Il est possible de tirer parti des SIG pour fournir à distance un soutien aux programmes, et par la même réduire les déplacements, ce qui est bénéfique à la du point de vue économique et environnemental. Dans le présent article, nous exposons les bénéfices potentiels que la technologie des SIG peut apporter à Concern, en s'appuyant sur une étude de cas spécifique, et nous proposons une feuille de route pour les SIG au sein de Concern pour les années à venir.

Le rôle des données numériques dans la construction de communautés résilientes

Par Dom Hunt

Le système d'indexation de résilience des communautés (Community Resilience Indexing System – CRIS –) regroupe des scores se rapportant à un ensemble d'indicateurs visant à mesurer la résilience d'une communauté. La résilience est un concept complexe qui demande des interventions dans de multiples secteurs. En fin de compte, la meilleure façon de mesurer la résilience, c'est d'attendre qu'une catastrophe survienne et voir comment la communauté y fait face et rebondit une fois qu'elle est survenue, et mieux, espérons-le, que la fois précédente. Cependant, nous n'avons pas, dans des circonstances conventionnelles, le temps d'attendre qu'une catastrophe se produise - nous devons procéder au fur et à mesure, de façon à mener des évaluations et à voir si nous faisons bien ce qu'il convient de faire ou non.

Le CRIS utilise des indicateurs supplétifs, ce qui renvoie à des éléments dont nous pensons qu'ils constituent des prérequis en matière de résilience, sous le terme de caractéristiques de résilience communautaire. Les caractéristiques sont déterminées sur la base de 6 capitaux de moyens d'existence (sociaux, politiques, humains, physiques, financiers et naturels). L'identification des caractéristiques se fait au niveau communautaire et national, en reconnaissance du fait qu'il existe des processus, qui surviennent en lien avec le contexte global (comme la gouvernance nationale), qui peut

avoir un impact au niveau communautaire. Nous espérons que, durant l'année 2016, les données de CRIS seront collectées par le biais de la Collecte de données numériques (Digital Data Gathering).

La technologie peut-elle contribuer à des résultats positifs en matière de développement ?

Par Kai Matturi

Concern s'est engagé de manière significative à utiliser des équipements technologiques dans le cadre du travail mené dans le but de réduire la souffrance et la pauvreté. Cela transparait de façon évidente dans l'inclusion explicite d'équipements technologiques dans le plan stratégique actuel de l'organisation, ainsi que dans les investissements faits dans les technologies de l'information (IT), en matériel, logiciel et personnel qualifié. Cette décision stratégique d'adoption d'équipements technologiques s'appuie sur les dernières expériences positives en date incluant des équipements technologiques. Malgré les réserves de certains chercheurs et praticiens du développement, d'après l'expérience de Concern, la technologie à la capacité de contribuer à des résultats positifs en matière de développement, et y contribue réellement, avec la bonne approche et le bon usage.

Dans le présent article, je présenterai les points de vue de personnes qui ne sont pas convaincues du rôle de la technologie dans le développement, et examinerai deux exemples positifs de la façon dont les équipements technologiques ont fait avancer les programmes de développement et d'intervention d'urgence de Concern.

Assurer l'avenir des technologies de l'information au sein de Concern

Par Vincent Richardson

La technologie a changé la façon dont Concern s'engage et interagit avec les gens. Il y a vingt ans, communiquer avec les personnes sur le terrain consistait, au mieux, à envoyer et recevoir des fax et, plus souvent, à envoyer des courriers par le biais services de messagerie. Un échange d'information pouvait littéralement prendre des semaines avant de s'effectuer. Le paysage est aujourd'hui très différent. Nous utilisons le courrier électronique et Skype pour communiquer avec les membres de notre personnel dans certains des lieux les plus éloignés et austères au monde. Plus récemment, nous utilisons des équipements technologiques pour améliorer notre façon d'interagir avec les personnes participant à nos programmes, ainsi que pour évaluer nos interactions avec elles.

Le besoin de travailler plus intelligemment avec des données sera un thème central du prochain plan stratégique sur les TIC. Beaucoup de choses ont été écrites à propos du « big data » et, en tant que tel, ce terme est beaucoup trop employé. Le terme de « right data » (données correctes) est moins employé, mais il s'agit d'un terme bien plus approprié pour décrire la réalité des besoins des entreprises au quotidien. Si les revenus sont ce qui maintient une entreprise en vie, une veille stratégique qui permet de réunir des informations utiles est l'oxygène qui alimente ces activités. L'effet des données correctes est au maximum de sa puissance lorsque les outils d'analyse adéquats sont disponibles pour filtrer ces données, et lorsqu'il y a des personnes qui connaissent les bonnes questions à poser. Plus simplement, pour que nos systèmes soient « en cohérence avec les raisons pour lesquelles nous les utilisons », ils doivent être accessibles, avec la bonne information, au bon moment.

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All staff involved in designing, implementing , managing, monitoring, evaluating and communicating Concern's work. This publication should also be shared with partners.

What this publication includes

- Promising practice
- Organisational learning
- Promotion of multi-sectoral and integrated approaches to programming
- Links to full reports

What it doesn't include

- Targeted recommendations
- Additional evidence not included in the papers cited
- Detailed descriptions of interventions or their implementation

Editorial Working Group

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