CHAPTER 20

Last Mile Media: A How-To Guide

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We've spent much of the last decade thinking hard about how to reach marginalized communities in some of the most remote regions in the world with life-changing entertainment-education. Many of our audience members are overlooked by traditional interventions (thus the "last mile" in this chapter's title), so a little information can change lives in a big way. However, strategies to reach them have required innovation and invention on our part. In this chapter we will share the essentials of what we've learned and some of our successes and mistakes.

Our organization, Peripheral Vision International (PVI), started out with deep, ethnographic fieldwork in Uganda, and many of our case studies draw from our experience there. But in recent years we have used those principles of "Last Mile Media" to work with a broader array of partners and expanded to other countries, producing and distributing EE media that has been viewed, read, interacted with, or listened to hundreds of millions of times across dozens of countries. Over the course of this decade,

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we've copied, remixed, innovated, invented, stolen, and been stolen from, all in the name of our ultimate objective: to make a better world using media. Though our work is informed by scholarly theory, this chapter is written primarily for the emerging practitioner or "pracademic" who is actively designing and strategizing media campaigns in the Global South. So, without further ado, here are our top "rules of the road" for designing and implementing last mile media.

DEFINE YOUR CHANGE

The purpose of a media campaign is never to save the world, but it is to change it, often in some small, but important (and preferably measurable) way. Think about five years down the road: when your media campaign has come and gone, what is the difference in the world that you reasonably expect to have made? The more we get away from abstract concepts, the more effectively we can design a media campaign. Too often in the jargon-filled NGO sector, we are tasked with goals that are both very broad and incredibly vague: "We want to improve health"; "We want to empower women"; "We want to build the capacity of civil society"; "We want to sensitize the stakeholders"; or "We want the public to speak up." When you dig down, you find that partners often have a hard time defining what precisely they are trying to achieve, and until you do, it is impossible to decide whether media is the best tool to achieve that goal.

Before you can even begin to think about what kind of media campaign you want to run, the first thing you have to do is to break these abstract concepts down into very specific, precise goals. Traditionally, media campaigns can attempt to impact three outcomes: knowledge, attitudes, or behaviors. For example, in the case of intimate partner violence (IPV), media might try to affect change in an audience member via knowledge (the audience member learns that IPV is illegal), belief (the audience member decides that IPV is wrong), or behavior (the audience member stops practicing IPV or actively reports/acts to stop others from practicing IPV). As you can guess, it is a lot easier to impact knowledge than behavior. You should also begin at this early stage to think about the complexity and practicality of measuring each of these three things.

As Don Green (2021a) writes elsewhere in this book, "It is clear that narrative-based media content often has meaningful effects on attitudes and behaviors, but rarely does one see profound and enduring changes." The "magic bullet" or "powerful effects" schools of thinking went out of

fashion more than half a century ago. These days we understand that media effects are limited but cumulative. I encourage you to read about Cultivation Theory (Shanahan & Morgan, 1999) to think more about how the media can add up to large changes over time. With that in mind, define your change, and be realistic about what you can accomplish with the time, budget, and technology that you have.

Get Your Boots Dusty

While desk research about a media landscape is important (though often unreliable in last mile settings), it is no substitution for the field. And by "field" we aren't talking about the hotel restaurant or NGO office. Too often those who work in development confine themselves to the usual spaces and talk to the usual suspects. The goal of last mile media distribution is to disrupt this model and create better, broader systems for reaching real people who not only claim to speak for the masses but also *ARE* the masses.

As Sheila Murphy (2021) writes, "Researchers and EE producers need to remember that for many EE projects you will work on, you are not a member of your target audience." This means you must go to the places where your actual audience lives, works, and plays and find out from them how best to make a difference in their lives. Talk with them like the equals that they are. Your audiences are intelligent people who have not enjoyed the same privilege as many of us in this profession, but who understand their own lives and society and can give insight into their practices, needs, and desires. Finding out what your audience wants and what they need, learning what they already enjoy, whom they already trust, and how they already consume media, are essential in designing your last mile media strategy.

One great research site is the local market—not the craft market or fancy stores in malls, but the actual market areas that are rarely visited by elites or outsiders. Explore the clothing, DVDs, CDs, school notebooks, and other commodities where branding may appear. Pay special attention to pirated or bootlegged content that is locally produced. The fact that merchants went to such lengths to download and duplicate this content means that they perceive a consumer's desire for it.

Getting our boots dusty in the field has been key to our work. We've counted aerial antennas in fishing villages on remote islands in Lake Victoria, watched action movies in storefront cinemas in refugee camps,

convened focus groups under mango trees, and conducted interviews in fields, marketplaces, and moving taxis. This experience helped us launch one of our most successful projects. In 2015 we were hired by a UN agency to distribute DVDs featuring condom PSAs bundled with popular music videos to ambient screens in Karamoja, one of the most remote regions of Uganda. What we discovered is that everywhere we went people had basic cellphones. It was their only media tool. They were using them primarily for phone calls and to listen to the radio. They couldn't read or write in their first language of Karamajong, so SMS was basically useless as a tool. When we got back to Kampala, our desk research showed that mobile telephony was undergoing an amazing transformation at that time. All across Sub-Saharan Africa, people went from having no phones straight to mobile telephony. But though it was leapfrogging, it was landing in a different place from the West. Smartphones were confined to the capital and to elites—those who could read and write, afford expensive technology, and had regular access to electricity to charge the energy-hungry smartphones. For the rest of the country, it was basic phones.

We spent months utilizing a design thinking process (learned from the Dutch organization THNK) to come up with a new way to use basic telephony as an EE platform. After much iteration and prototyping and more than a few misfires, what emerged was a platform that we called "Wanji." The concept was simple: people can call a toll-free number and encounter a spoken "choose-your-own-adventure" style interactive narrative in their local language ("Interactive Voice Response" is the technology involved). They maneuver through the story using the buttons on their basic cell phone. The platform was meant to combine the aural accessibility of radio, the ubiquity of the basic telephone, and the entertaining and educational potential of interactive narrative in a way that was nationally scalable with minimal cost.

We established a partnership with an organization called Viamo, which makes deals with mobile network operators to provide free airtime for social good projects. This costs little and provides telecommunication companies with a value-added feature that helps them compete. The platform won an award from MIT and has since scaled to 15 countries and reached over 3 million callers to supplement campaigns on topics ranging from family planning to climate change-resistant agriculture to COVID-19 prevention. But we never would have come up with it if we hadn't gotten out of the city, gotten out of the car, and talked with the people we met along the way.

Plan Distribution Before You Produce

There are three core aspects to EE creation: research, production, and distribution. Too often, practitioners take an approach along the lines of, "First we will produce the media, then we will figure out how to distribute it, then we will figure out how to measure it." The less your media campaign takes that approach, the more effective it will be. The elevation of distribution over production in our preliminary thinking about EE has been key to every successful project we've worked on.

While there are artistry and craft in the creative elements of EE, it is important that we don't think of ourselves as artists. Art for art's sake has no place in EE. The needs of the audience are paramount. And their needs will not be served if we don't prioritize our strategy for how to reach them in the first place. This will also, ultimately, make your production process easier. The creative aspects of media campaigns are often the most time-consuming, costly, and difficult to correct. The more planning goes into the other aspects ahead of production, the easier, more focused, more impactful, and more cost effective your production will be.

We learned this lesson the hard way. In one of our earliest projects in Uganda, we targeted local "video halls," or small informal cinemas that play action movies on television screens for patrons who pay a few cents to sit on wooden benches and watch. There are thousands of these video halls across the country; at that time, they were the only way to reach large audiences with video content in Uganda (Fig. 20.1). Our interviews revealed

Fig. 20.1 Inside a typical Ugandan video hall (kibanda)

that dramas and actions were some of the audiences' favorite genres, and they liked local stories. We also discovered that video hall owners did not feel they were respected in society, so we attempted to combine all these opportunities into a unified project. We produced an action-packed 20-minute short film that told the story of a heroic video hall owner who stands up to a corrupt politician when he rolls into town (the campaign was about political corruption and governance). We distributed DVDs of the video to hundreds of video halls, but the video got no traction in this format at all. Why? The video hall owners loved the film, but explained that they only show feature-length films and music videos in between films. A short film simply didn't make sense for their business model. In retrospect, this makes perfect sense. These were the local equivalent of movie theaters. When was the last time you paid to see a standalone 20-minute movie in a theater? We had designed great content in the wrong way.

We corrected this mistake in our next project. We talked to our end users and worked backward from that. The video hall owners played music videos between films to attract an audience to the next screening (they called this "the crowdpuller"). But the music video disks they purchased were often faulty or out of date. We also learned that other businesses liked to play Ugandan music videos (bars, long-distance buses, beauty salons, etc.). In all of these settings, a single screen reaches many, many viewers. We also studied the way that MTV in the United States launched; it took advantage of an opportunity in the new market of cable to make money on advertising by putting free content (music videos made by record labels) between the commercials.

We mixed this all together and created *Crowdpullerz*, a straight-to-DVD music video show that bundled the top 12 Ugandan music videos with public service announcements, news segments, and other pro-social media. We created a distribution network that delivered free DVDs every two weeks to over 4000 public screens (video halls, beauty salons, restaurants, busses, etc.) across 24 districts in Uganda. The business owners gladly play Crowdpullerz because we are providing content they want in a format that works for their business model. The project reached millions of viewers through more than 100 episodes and ran for 9 years until COVID made door-to-door delivery impossible. The reason it worked (and the reason it eventually ended) were shaped by the distribution context.

Hack the Media

Learn what tools your target audience already has, what media they already enjoy receiving, the messengers they trust, and then figure out a way to use old media in new ways. Don't reinvent the wheel. Remix it.

For instance, in 2013 we were approached by members of the Black Monday movement in Uganda, which sought to raise awareness about government corruption. Whenever they tried to hand out pamphlets on the street, they were arrested. We scoped media outlets and co-created a new outlet for them. "Matatu" minibuses are the primary public transportation in Uganda; in the capital they gather at a couple of central taxiparks that fan out to all corners of the metro area. We decided that this central distribution point could serve as an unconventional spot for last mile media. When talking to matatu drivers, we found that because the taxis were old, they almost all still had old-fashioned audiotape decks, but cassette tapes of contemporary music did not exist. We worked with the Black Monday Movement to create an audiotape format that packaged popular music with short informational segments on corruption and the Black Monday Movement. One Monday morning, instead of getting arrested trying to hand out a few flyers, unlabeled black tapes appeared in all the minibuses in the capital. The "Black Monday Mixtape" went out to more than 1000 matatus that week, reaching a much broader audience than their flyers could have done and with no arrests.

In another example, an organization approached us that was trying to show "farmer to farmer" videos to improve agricultural techniques in remote, off-grid villages. They were using "mobile cinema" kits (generator, projector, screens, large speakers, etc.) to show the films, but women had difficulty attending the screenings. The projectors they were using needed darkness, but women didn't feel safe traveling at night to a screening and weren't comfortable sitting in crowded, darkened rooms during the day. We began by asking ourselves: how are these challenges (sun, public spaces, remote, off-grid) actually opportunities?

What emerged was a tool that we called "Village Video" or ViVi (Fig. 20.2). It is a solar-powered microcinema in a suitcase that combines a low power TV screen, speakers, and public address system. Able to be packed up and transported on the back of a motorbike or in the flatbed of a truck, it was more durable, more affordable, and more transportable

Fig. 20.2   Village video in the field

than the microcinema our partners were using before. Importantly, ViVi works best when it is pulled out in weekly markets or other settings where women and families gather in public during daylight hours. With no other entertainment to compete with, ViVi could roll in and steal the show at these gatherings, attracting large crowds with its novelty. When our partners went to the field, they immediately saw female attendance double from when they were using traditional mobile cinema tools.

Our upcoming project hacks a format rather than a medium. All across Sub-Saharan Africa, imported telenovelas from countries in Latin America and Asia fill the airwaves. Why? The shows are inexpensive for TV stations to acquire and audiences like them. As one television executive explained to us, audiences are drawn to stories of "love and wealth." We didn't have millions of dollars to produce our own pro-social EE telenovela, but we saw an opportunity in the existing media landscape. We bought the rights to a Venezuelan telenovela, and "hacked" or "remixed" it by re-scripting, re-dubbing, and re-cutting it into an entirely different show that focuses on messaging around sexual and reproductive health, contraception, and female empowerment. The title, inspired by that network executive's insight, is *Love and Wealth*, and it is scheduled to launch across Africa in early 2021.

"Entertainment" Is the First E

Creating effective EE is a tricky business. How do you create something that is more like "candy with vitamins" than "chocolate-covered broccoli"? It is hard enough making something enjoyable, let alone trying to make it beneficial. And EE is tasked with both—usually with a budget that is a tiny fraction of a commercial production. We are set up to fail and are all crazy for being in this business. As Martine Bouman (2021) writes, "When writing drama for educational purposes, the entertainment comes first." We know that people comprehend and remember through narrative and make choices based on emotion. So the content you create needs to move your audience. It needs to inspire them, to draw them to it on its own merits, to transport them. As Melanie Green (2021b) writes, "Individuals who are more transported are more likely to adopt beliefs, attitudes, and behaviors that are implied by the story."

In Uganda, where the median age is 15, young people will determine the future of the nation's governance, but there was almost no civic information or news platform that targeted them. Our field research showed that music was their favorite media and that it also had a cultural history of teaching, originating in Bakisimba traditional music, which evolving into Kadongo Kamu and later into the Lugaflow genre of rap. In Senegal, rappers Keyti and Xuman had started posting YouTube videos of themselves rapping the news and calling it *Journal Rappé*. We combined all this and worked with local musicians to co-create *Newz Beat*, a weekly English and Lugaflow "rap news" TV show that reported on news from Uganda and around the world (Falzone, 2017). The show looked nothing like traditional TV news. Staid reporters were replaced by dreadlocked "raporters" who delivered news and editorial opinion in rhyme and flow. Bright visuals, swagger, and style all heightened the entertainment aspect (Fig. 20.3). Journalism is tightly regulated in Uganda, but the playful format read as nonthreatening and allowed us to feature edgier topics that never would have made the cut in a traditional format. But above all, the format was *fun*. We always put entertainment first.

The show was picked up by the top-rated television station in Uganda to air before their flagship news program on the weekends. We supplemented this distribution with online uploads, by making the audio available to radio stations and included the show on *Crowdpullerz*. The show ran for four years and became one of the most recognizable media

Fig. 20.3   Not your stereotypical newscasters. The Newz Beat team

properties in the country. Our internal analysis of ratings data showed that we were increasing ratings for the regular news by 16% on days that *Newz Beat* aired. It was also generating measurable changes in the audience (Shaker, Falzone, Sparks, & Kugumikiriza, 2019). But when music superstar Bobi Wine decided to run for president against Uganda's leader (who first seized power in 1986), the government suddenly began to perceive popular music as a threat. *Newz Beat* was abruptly canceled. So be careful. Your intervention might be *too* successful.

Leverage Commercial Competition

One of the measures that we use to assess whether a project is a success or not is "do we need to pay people to distribute and/or consume this media?" If so, then we continue workshopping until a different strategy emerges. It is always better to create something that your audience wants to see and your distribution partners want to show than to force media down their throats. Your creations don't necessarily require a business model (though certainly it would contribute to the sustainability of the project), but they should be something that your audience likes so much they may be willing to pay for it with their time and attention.

Our eyes are always on commercial distribution practices and, more precisely, on the needs of commercial distributors. The best distribution

strategies are ones that solve a problem for a commercial distributor. If you can provide material that gives these parties market advantage or cost savings, then you can leverage their reach for your own ends.

For example, over the past few years, we've been tracking how the growth of microsolar electricity has been changing media consumption in Sub-Saharan Africa. What we discovered is that there is a revolution going on, but it is a quirky one. As the head of a major television station in East Africa told us, "Solar is growing our audience, but mobile is eating our audience." What they meant was that wealthier households (who are more desirable for advertisers) have more screens in their homes. Mobile phones, tablets, and expensive digital and satellite TV have fragmented viewership within the home and shrunk this valuable audience for the major networks who do terrestrial in-country broadcast. Advertising dollars have fled to digital. On top of that, the recent shift from analog to digital broadcast meant that these television stations now have two or three channels to fill instead of one, with more competitors than ever competing for shrinking advertising dollars.

At the same time, the massive and recent growth of small-scale solar power means that their audiences at the bottom of the socioeconomic pyramid have been growing. Unable to afford satellite television, these new viewers are tuning into free television. With fewer screens and less jaded attitudes toward the media, there is also a lot of co-viewing happening among these audiences (young and old watch together). What this means is that it is a terrible time to run a commercial television station, but a great time to leverage their pain to reach those audiences.

When COVID struck, we determined that we needed a way to directly transmit health messages about COVID, elevate trust in science, and help reach kids who were out of school. At the same time, we could encourage girls to become more involved in science. So we quickly created a pilot and pitched a TV series called *N*Gen* (Next Generation) Television (Fig. 20.4). Africa has the largest youth market in the world and there had never been a science show made for them before. Major television channels in multiple countries signed the show based on the pilot, and by autumn 2020, *N*Gen* was launched on national television in Kenya, Namibia, Nigeria, South Africa, Uganda, Zambia, and Zimbabwe at zero distribution cost to us.
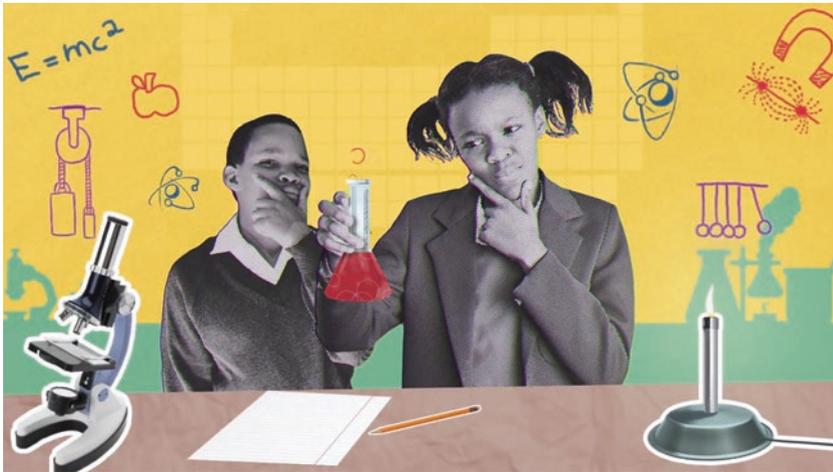
Fig. 20.4   Still from the opening credits of N*Gen

Research, Research, Research (Up to a Point)

Research is not a separate step. Ideally, it needs to be interwoven into every stage of your process. Prior to a project, you can conduct *formative research* such as desk research, focus groups, ethnography, interviews, and other methods that will help you to better understand your audience and the context. Prior to launch, you can *pretest* media, measuring liking, agreement, and/or comprehension. Focus groups are the most common method, but we've also used interviews and more quantitative measures like moment-to-moment dial testing. After your media launches, you can allocate resources to measure *impact* and *reach*. Common methods of impact measurement include panel research, surveys, and experiments (lab and/or field). The more you think about how you will measure impact from the get-go, the easier it will be to conduct this research.

Outside of digital, measuring reach is notoriously slippery, particularly if you are using multimedia, transmedia, broadcast, or "out of home" channels. How do you count views of a billboard? Or of 10,000 posters? This is made worse by the fact that there is simply no way to neatly parse views from unique viewers. If two episodes of a television show have one million viewers each, then did one million people see two shows or did two million people see one show? That's a huge difference, but common

methods do not reliably distinguish them. We've heard more than one tipsy advertising executive describe their media measurement as "smoke and mirrors." So be warned.

But while you need to research, you also need to make and distribute something using a limited budget, so you need to be conscious of the way that you allocate resources to research. Importantly, you have to be honest with yourself about *what* you are able to measure and whether what you are claiming is *true*. Media measurement is a murky business at the best of times, and donors *do not like to hear that*. They want to be told that X program aired on X channel, reached X number of people, and resulted in an X% uptake in behavior and X number of saved lives.

We've seen many cases where some combination of donor demand and/or simple lack of understanding of research biases results in clear but meaningless outcomes. The easiest way to create research like this is to combine a pretest/posttest survey where the audience knows what is being studied. Let's take the example of child abuse. You collect a panel of people; you pay them to be studied (perhaps call it a "transport fee"); you do a pretest survey on whether they hit their children that primes them about the topic; you show them some media that explicitly discourages child abuse; and you replicate the survey in a posttest. Now that they know what the study is about and what you want to hear, they know how to answer the questions to make you happy. At that point, you can run a variety of statistical analyses to show internal validity, and you can claim that your intervention decreased child abuse by 50% in X district. Did it though?

A century of theory and research has shown that media's effects are rarely so cut and dry. Impact can be difficult to prove, and relying on the literature can be fraught, as studies with ambiguous results or boomerang effects are rarely published or publicized. So be realistic about what you are able to measure and, above all, honest with yourself and others about your findings, even if they don't say what you want them to.

Lessons Learned and Best Practices

In this job we are always working with too little funding, too little time, too few people, and too great a burden of change. The more tactical we can be in deploying those limited resources, the greater chance we have of creating media that people need and reaching the people who need it the most. To do so, remember these lessons.

Begin with Harold Lasswell's (1948) iconic "5 W" model of communication, which focuses on: Who (says), What (to), Whom (in), Which Channel (with), and What Effect. Begin to define these constituent parts when designing your own project. Define the change you want to see in terms of knowledge, attitude, and/or behavior.

Think carefully about the audience who can help create that change. Get to know your end users by getting into the field.

Question whether the media is the best tool to realize change. Find out what media tools your audience can access, what formats they enjoy, and what messengers they trust.

Design production based on distribution. Who already has access to your audience? Find their pain points and solve their problem in a way that benefits your project's goals. Monitor distribution to make sure what is supposed to be happening is happening.

During production, iterate as you create to catch misfires early. Create contingency plans for when things go wrong. Because they will go wrong.

Build research into every step of the process to the degree that budget and time permit. Be realistic and honest about what you can measure. Share your successes and mistakes so that others may learn from them.

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