Jean Orelien, SciMetrika, Haiti

Interviewed by: Nils Nelson and Daniel Lee, Ernest and Young and The George Washington University



Dr. Jean Orelien

Dr. Orelien, currently the CEO and Co-founder of SciMetrika, was interviewed in May 2013 by Nils Nelson and Daniel Lee. This interview, inspired by the book, Profiles in Courage. This highlights a courageous moment during a crisis in the life of a prominent statistician.

Along with being a statistician, Dr. Orelien became a successful business man. His company SciMetrika, has been ranked as one of the fastest growing privately held among nonminority and minority companies. When the earthquake struck his native country of Haiti on January 2010, Dr. Orelien knew he must contribute and help the people whose lives were affected. Since then, Dr. Orelien has been hard at work in restoring and developing Haiti's economy through job creation.

Early life

Jean: It may be helpful to talk about my experience. I was born in Haiti. I moved from Haiti when I was

ten years old to the French westerndy's, to an Island called Guadalupe, which is a territory of France, in the Caribbean. I finished my high school education there and then moved to the US where I got a bachelors in Math from Rutgers University and then I went to NC State where I got a masters in statistics. After my masters, I worked at a company called Constella. Fortunately, I was able to move pretty quickly through the ranks in terms of being promoted and moving from a career as a statistician to a program manager.

Everything that I have done has been in the public health space. In 2004 I went to SciMetrika full time, eventually to be leading SciMetrika, as its CEO. SciMetrika was founded by a colleague and me. My colleague was running the company in 2001 and then I took over in 2004 as the CEO.

One of the reasons we created SciMetrika is that we realized that there needed to be a company that was focused on public health and that would provide services that were of a scientific nature. So what I was looking for was to create a company where you could bring a wide [range of] expertise in public health fields under one roof. [Then] you could provide any services that relied on science or were methodology driven where a group of peers could look at it and say 'you know what, if you follow this methodology, then the results/outcomes, do make sense.'

So that was the goal we had for SciMetrika and I felt that, additionally, the landscape was limited. In a comparative sense, there were not a lot of companies that were focused on public health. Contrary say, to defense or health. There are a lot of contractors in defense that are well known. But when I looked at the public health space, you didn't have a contractor where someone would say 'public health is really what they do.' I wanted to provide that but I didn't want us to be going after everything that was labeled 'public health.' I

wanted us to focus on the science, because that is what I saw was lacking, and that is where I saw that the multidisciplinary aspect would bring value to the client. So I focused the company generally not on public health, but on the intercession of public health and scientific methodology.

Nils: What types of employees are currently working at SciMetrika?

Jean: Most of our employees have masters and PhD's in public health. [We have a few different aspects of work here]. We look at public health from the standpoint of quantifying scientific studies, doing primary data collection like in surveys, or analyzing academic data sets [created by others]. Then we don't just do statistical analysis or quantify scientific studies, we also help 'double-up' programs.

If you were to do a visibility or pilot study, there is some methodology behind it, so we work not only on doing the data analysis but also in helping our clients to 'double up' programs, to implement those programs, help the communication, and then evaluate those programs to see if they are working. Anyway we work across the full spectrum in public health; so we [perform more general tasks] in public health as opposed to experts in one area.

That does not mean that we don't have employees who are expert in a particular area, because, for example, we have done a lot of work with cancer data so we have some people who are cancer experts. We also have some HIV experts. But the company as a whole is not focused on one area. [Call us] subject matter agnostic. We are broadly public health experts.

Nils: Ok. And I read that you got a PhD in biostatistics?

Jean: Yes, I have a doctorate in Biostatistics.

Nils: Are there a lot of other statisticians that you work with, or are they mostly masters and PhD's in public health?

Jean: Data is key to any decision making process in public health. You have to do a lot of survey assistance. The company was started with a lot of statistical work. I mean statistics and epidemiology is a key component of the company. So, yes, we have PhD level statisticians. And, actually, I am not the lead technical statistician in the company. I am the CEO... but that doesn't mean that I don't contribute [statistically]. But we have other statisticians in the company and I am proud to say that they are more competent than I am in statistics.

Transition from technical to managerial

Nils: You know that actually brings up an interesting point. I have spoken with other CEOs where their experience sounds similar to yours. They start out as participating in the technical aspects of the job and, then, as they progress [in their career] they move more into managerial [and leadership] roles. Can you talk about your transition?

Jean: Sure, I can talk about it. I don't think that this is unique to the [statistical field], it [happens] in any technical field where you start out as more of a technical person. There is a progression where you are afraid of losing some of your technical skills. [This progression begins before you become a CEO]. This was true even before I founded SciMetrika.

In graduate school, they do not teach you about project management. When you [come] into a [career] outside the university [where] you are working on projects, you need to have skill sets other than your technical skills. There is some art too it. That may be project management, working on a team, and/or leading a team. As a project manager, you manage projects but you do not necessarily manage [lead] people. Then, you progress to managing [a portfolio of] projects, where instead of managing maybe one or two projects you manage multiple [projects]. You also begin managing people and have project managers reporting to you. Eventually you are in charge of a unit, like statistical programmingSo you have that progression, and as you progress, you are spending less time doing programming, for example. At some point you do not do those things. So you have to be aware that your job is not based on the technical work that you are producing. It is based on reaching financial goals, meaning reaching certain goals for revenue or profit.

I definitely think that I bring value to the company as a technical expert, opposed to an MBA. I think that I have the right background for the company...having the technical expertise and then adding the non-technical expertise like [expertise in] project management, financial management, and the skill sets that come with being an executive. As opposed to where you take an executive and ask them to learn enough about a technical field...that may be difficult.

Those are two different models. The model of a statistician, who progresses to [a point] where they have to add on non-statistical/technical skills to become an executive, CEO, or midlevel manager can be a difficult transition. You want to hold on to what has gotten you so far which are your statistical skills. This

could be your expertise in programming. This is something that you have to let go and I have seen people struggle with that. I made a decision early on that 'what I have to offer to the world is not necessarily my statistical skills,' but I am more of a leader so to speak. I am an executive who happens to have that background in statistics. So, I made that transition.

It can be a difficult transition that a lot of technical people have to make because the world does need people with technical backgrounds [who] then [learn] more skills to make them a better executive. The world cannot [be] run on [simply] by executives or midlevel managers who have, say, an MBA background and then try to understand the technical aspects of the work.

Nils: I think that was very well stated. I liked the part where you said that you could be a great leader in your field and that you had to make that decision to give up what had gotten you so far. Even though you still do those things, they just are not as prevalent now.

Jean: You know, these guys who are purely technical, they do not have time for management; this is not the best thing that they can offer to the world. They need to focus on their technical skills. But that requires someone [else] in the organization to provide the leadership.

Nils: You have mentioned the phrase, 'offer to the world' a couple times. I wonder, is that what motivates you to strive for excellence, what you can offer to the world?

Jean: Well you know I think that I have been blessed and I think that I have a unique background. When I started, my parents were very poor. [They were] socially and economically disadvantaged. By all statistics and any measure I think that [we were] living on [a very rudimentary] level. I had seen my mother struggle and I think from early on that I learned from my mother, in particular, lessons of leadership. [I learned] that you [can] create something out of nothing. My mother used to say she would 'beat water to make butter.' She would make butter out of water; she would make something out of nothing. She pushed me a little bit. I saw her struggle. But she always put food on the table. She never did anything illegal or unethical. She just worked hard, she found a way to sell things, a poor woman in Haiti finding a way to basically be entrepreneurial, to sell things and bring enough money to the house. It wasn't a lot. We didn't' eat meat everyday. We would eat meat, say, once a week (on Sundays most of the time). But we had food.

So from early on, I have been pushed by that. I didn't want to have the same level of poverty as my Mom.

So from early on I was pushed. I was [also] fortunate to have a set of circumstances in my life to create a better opportunity. I believe that we have a purpose on this earth and I think that that purpose is to leave the earth a better place than what we found it. I think that we can all make a difference. I have been fortunate to go basically from survival to where I can provide for myself and for my kids and now I would like to use the skills that I have been given to make a difference. I am not just happy that I have reached a goal where I will never suffer the same level of poverty that my mom went through. I will never have to look at my kids in the eye, not knowing what I am going to feed them. You know...not knowing where the next meal is going to come and having to figure out 'how am I going to make it?'

You know I am fortunate enough to [have reached that goal] and now I would like to help as many people to be in the same situation [that I am now in], to help as many people as I can to overcome extreme poverty.

Haiti earth quake

Nils: That is a very nice transition into your experience in going into Haiti after the earthquake. Can you expound a little bit on how you used your vision in terms of contributing to the world and leaving it a better place when you went to Haiti after the earthquake?

Jean: After the earthquake, when I saw all these people dying, I realized that I could be one of those people and it made me realize how blessed I was. I was living in the suburbs [in North Carolina] with my family and kids. And I said 'I need to figure out what to do. I need to figure out how I can help.'

Nils: Were your parents still in Haiti during this time?

Jean: No. My parents had left. Most of my family [by this time] had left, although I still have siblings in Haiti. But my parents had left and most of my immediate family members are no longer in Haiti. But again, I have cousins and half brothers and sisters [who are still there].

I had plans to give back to Haiti but I wanted to do it after my kids were born and out of the house, in college. That is when I planned to do it but after I saw the earthquake I said 'you know what: I need to help now. The country needs somebody, like me, who can help now, not later'. So there was a sort of [personal] urgency after the earthquake. That is when I decided to reengage and go and help and I thought the best way was to use my statistical skills.

So I went there. After we [implemented the survey] I have been going back and forth and I just got back from Haiti. So we did the survey and one thing that I realized is the way that I could help Haiti and make a difference was because of my background as a businessperson. And I realized that what the country needed more than anything was creating jobs – the private sector creating jobs to help people out of poverty.

I came quickly to the conclusion that Haiti [may] have too many NGOs; it may be not good for the country to have so many. That is something that I looked into. And the more that I learned [convinced me] that having so many NGO's is actually detrimental to Haitian growth. I had considered building an NGO to help with education or public health. But, then, when I started to look into it, I realized that this is not what the country needed; there were enough NGOs. What the country needs is job creation in the private sector. So I [asked myself] to figure out 'how do I engage the private sector in helping to create jobs?'

Nils: Interesting – So how did you do it?

Jean: I have bought 40 acres, and I am buying more land to do a housing development – to do a makeshift development that would include residential and retail. And that is the part that I want to engage in. This is the first project that I am tackling but I have also been involved in other companies. I am also considering a rental car business. I have interacted with a number of investor groups, looking for deals that I can be a part of as an investor; Also, maybe, as a consultant to help them get their businesses going. Right now my main focus is a residential/real-estate development near the largest lake in Haiti.

Transition to entrepreneurial

Nils: That makes a lot of sense. One question that I had is ... You mentioned that your 'intention was to begin giving back to Haiti later in life, when your kids were out of college but then, you recognized that there was a need in that moment of the earthquake and that it was urgent. You said 'we need to act now.' This was a time when you were starting up your SciMetrica Company, you had a family, and I am sure that you had other responsibilities. How were you able to add on [yet] another significant task like this, when you [already had a full] schedule?

Jean: Well, SciMetrika was created in 2001 and I took over in 2004 so in January 2010, SciMetrika was more mature. I think by that time we had something

like 70 employees. We had some seasoned staff. But it didn't mean that the company didn't need me. There certainly were difficulties. It required me to travel internationally and it still requires me to travel internationally. But I also think that there were some personal goals on my part [that compensated].

I don't think that I could have done it before because when you start a company it is like your baby, so to speak, and you are intimately attached to that baby for obvious reasons. It goes beyond the financial reasons that pay the pills. It is also because there is that strong attachment. It is kind of a part of your family, almost like one of your kids. I think, for me, I have been able to trust leaders. I have been able to trust other people to make decisions and to let go. I didn't have to be involved in every single decision. So it is kind of like letting go.

In my life I have gone through a number of transformations and one of those transformations was, as we talked about, to let go of my statistical skills. To essentially realize that what got me so far, which was my statistical skill, may not get me to the next level. I had to accept the fact that my statistical skills would become dull. [I had to let go of the skills of, for example, programming in IML or in running complex simulations].

The same thing happened in business. In 2010, I had started to transition and to go to the next level as a businessperson, where I started to rely less on my [own business] skills and to rely on [other] leaders and be comfortable with the fact that [other] people have to make some decisions. Some of those decisions, I [wouldn't] be happy with and I might [have done] differently but it was okay. Because of that, I was able to go and have other leaders who [were] comfortable making decisions for the company.

Nils: That makes sense. But it sounds like that when you went into Haiti, you implemented some of your statistical skills and you created a survey with phones. Is that right?

Jean: Certainly, I mean I am still a statistician at heart. Like somebody said 'if you have to make a living the skills will come back pretty quickly.' [Nils: So you are saying that you haven't forgotten everything?] [laughter]

Jean: When I went to Haiti, [I was] thinking [how I was going to conduct the survey and considered issues of] bias. One of the things we did was use cell phones, which I don't think had ever been used before. Cell phones were very prevalent and it made sense to use them.

Nils: Just really quickly, just as an overview, what was the purpose of the survey? Then maybe we can get into the actual statistics of the survey.

Jean: So the purpose of the survey was to collect statistics that would help organizations make decisions as to the magnitude of the impact of the earthquake on dislocation and the economy.

Nils: So you designed the survey to understand the economic and other impacts of the earthquake?

Jean: Exactly. And then to discover whom the data affected the most and where.

Nils: And then were you going to deliver this data to different organizations so that they could help?

Jean: We thought that we would make the data available to everyone including the organizations and researchers.

Nils: Hmmm... Was this completely voluntary? Ya know, this sounds like a pretty big job. I mean, did you go on your own dime, did you get donations, or how were you able to fund all of this?

Jean: Well, SciMetrika funded most of it. I decided that it was something worth doing and so I reached out. Fortunately in some of my circles I had the help. I reached out to Statistics without Borders (SWB), and being able to get somebody like Fritz Scheuren, [Jim Ashley and Justin Fisher]...ya know we got some top minds who were willing to help. So we, at SciMetrika, provided the money but I can tell you that we probably would not have been able to conduct this work without the services of some top statisticians. We provided some money for travel and to conduct the survey, but we also had the help of experts in SWB. I want to give credit to people like Fritz for their generosity to basically take time away from their work to go there and say 'this is something that we want to support.' [Fritz, by the way, even paid his own way.]

Anyway, when I approached SWB, I contacted the then President of the American Statistical Association [The Chair of my old Statistics Department at UNCS, Sastry Pantula]. They [all] said that 'this is something valuable and we want to help you do it.'

Nils: So once you got the groundwork laid, what was the process like in terms of gathering the data? How long did it take to design the survey? ... Can you go into some of the details there?

Jean: When we got to Haiti, [we familiarized ourselves with the damage in the country]. It was a pretty impactful earthquake. The earthquake happened in January, and we went in March. There was [still] a lot of rubble in the street, people were living in tents, so the first step was to do some observations and to see

how bad things were and how that would affect the logistics of data collection. Quickly, we realized that it didn't make sense to send surveyors door-to-door to ask questions. [On the other hand] people had cell phones and that the use of cell phones did make sense. There were coverage issues, especially in the rural areas; but we would not have to worry about bias because even people with low socioeconomic status have access to cell phones. That is why it made sense to use that as our means of data collection.

Part 2 (When the interview resumes)

Nils: I appreciate that you are taking the time to talk to me again. (Jean: No problem). So we just got cut off a little bit last time. I just had a couple of follow up questions that I wanted to discuss with you. I want to understand a little more about your plans [concerning] Haiti and ask a couple of other questions. The first thing that I am wondering about is your short term and long term goals in Haiti. You [previously] talked about purchasing 40 more acres of land. Can you explain your goals concerning this land?

Jean: My short terms goals are to build a residential development in a region which is near the border between Haiti and the Dominican Republic. (Nils: you said it was near a big lake right?) It's next to the largest lake in the country. It is the second largest in the entire island. After that, to be involved [in the economic development] in Haiti, I feel strongly that more than anything they need sustainable jobs. To do that, in my mind, is to create jobs that are tied to a market where there is pay. I think that in Haiti there needs to be more residential developments, commercial development in real estate, also in industry where [there is] a lot of labor, like [in the] textile [industry] for example. So I plan to be involved in commercial and residential development, so that would be like hotels or industries that are associated with tourism.

Nils: [How much time do you plan on being there]? I also know that you are involved in SciMetrika, so I know you are being pulled in two directions.

Jean: That's true and I'm blessed that the leaders of my company are [reliable]. In some respect what I am doing is an extension of SciMetrika. In SciMetrika we have a vision of improving health. In a country like Haiti, you cannot talk about improving health without talking about economic development. It is difficult to tell someone to worry about the risk of getting HIV, if they don't know what they are going to eat the next day. Food security, which is tied to economic development, is a big factor. It is impossible for someone, even if they know their risk of HIV...[For example]

if a woman has to worry about what she is going to eat then it's going to be hard for her to turn away [her] clients by asking them to wear condoms. The point that I am making, and not just me, the leaders of the company too, [is that] part of the broad vision of improving health in countries like Haiti, is to work on economic development. So it's not a conflict. I am blessed, and the company is blessed, to have strong leaders [so that the] company can go on while I am working on other projects in Haiti.

Nils: Ok, that makes sense. You kind of see your SciMetrika company turning into this international company.

Jean: Yes, so being involved in what we are doing now in Haiti is consistent with our mission/vision. It is doing it first through economic development. [A] broader picture for SciMetrika [is about] improving lives. Here in America and most of the Western world, it would be mostly through health...like public health offerings and health services. In a country like Haiti it is through economic development.

Nils: Do you have a rubric to [measure] what would qualify as a success? Do you have a certain number of jobs that you want to create? How are you going to measure how far you want to take this?

Jean: One way to measure success is to look at the official number of jobs created that are sustainable [and] that are tied to markets and fulfilling the needs of the market. So that is kind of the way I see it. I think that we will hit success as we look at the economic impact of the jobs that are supported in Haiti.

Nils: That makes sense. The next question that I have is, going from the United States to Haiti I am sure there are regulations that have created challenges, let alone cultural challenges. I was wondering what kinds of setbacks you have encountered as you have gone into Haiti and how you have been able to overcome those?

Jean: I would say regulation and sometimes the lack thereof. Sometime the lack of regulation plays for you and sometimes it can play against you. Some of the challenges we found in Haiti were with land titles. We have secured a title for the land, and it takes a lot of time to get the titles for the land. In Haiti, land tenure issues are still a reality and a problem to deal with. We still get asked questions from potential investors [like] 'are you sure you have a title for the land?'

Fortunately, we can show that we have the necessary paperwork to show we have ownership. It is also draining in terms of energy to deal with this issue over and over again; to reassure potential investors that you

do have ownership of the land. So that is one thing because we don't have that system in Haiti like in the US... where you can get insurance for titles. So that is one issue and then the other one is that things are slow. There is a lot of bureaucracy. It is just a slow process. I think here there are processes in place so you know what the process is that you go through. The kind of process makes it difficult.

Nils: So you are saying in Haiti you weren't able to obtain insurance for the title?

Jean: To my knowledge there is no such thing as title insurance in Haiti. So as a buyer of the land you have to do your homework and due diligence. That is one advantage that I bring, someone who is not an outsider. I know the local language so I can go in and I can interview people and do some of the research myself to make sure the title is valid, to make sure that we are actually buying from people that do own the land.

Nils: Right. So it sounds like in Haiti there is not much regulation [which has] created some challenges. Have there been similar challenges here that you have seen with the US? I think a lot of people [think] that the US has too many regulations. I am wondering if you have encountered any difficulties going to Haiti from the US.

Jean: I didn't encounter any in the US, but I know my business partner [...] mentioned the fact that if we did this project here in the US we would have to deal with the [legal] impact. Obviously we want to be good corporate citizens and we intend to be [conscious] of the environment, and abide by ethical rules. We would not do anything here in the US that would be against the law.

There are also regulations here that are good. I think to some extent, my experience is that I know sometimes we complain against the rules here. I think the rules are necessary. If you think the rules are bad, things will go into a state of chaos. The rules are there to protect us, they are an inconvenience but they are useful. I prefer having the rules because if there are no rules then you are essentially expecting people to follow a moral code. That does not always happen.

Nils: So just so I understand clearly, it seems like you're saying the rules in the US, even though sometime they are an inconvenience, overall they are there to protect you.

Jean: Absolutely. I like the rules. In the US it would require an economic impact study. In Haiti they don't require you to do one, so it saves you time. [We] are going to act as a good corporate citizens, we will not engage in any activities that are against the rules. I am

not sure that will be true for everyone. For those who will not follow the rules and follow the moral code, I think the rules are there for that and to protect all of us. To that extent, I think the rules are inconvenient but they are useful. So I think I have an appreciation for having the rules in place in the absence of them.

Nils: As an overview, it sounds like there is some pretty good momentum that SciMetrika is going through right now. It sounds like things are going well here in the US and that you have this big project that you're undertaking there in Haiti. This kind of goes along with the overview of your company but I wonder as a more personal question – how would your colleagues describe you in terms of going out and doing these things and being proactive? Just to get a better sense of who you are. I am just wondering how you think your colleagues would describe you?

Jean: I think you should ask them. I am happy to give you their contact information to ask them. They are the ones that asked me to be home. They said 'You cannot be separated as a leader. You cannot be involved here at SciMetrika and working at Haiti where it gets disconnected. You got to be home.' So they encourage me to bring the work in Haiti to the larger vision for the company. They asked me to go to Haiti. So we are planning to go to Haiti (the leadership of the company) this year. I think they use words like fearless leader and they see my story and see who I am as an inspiration. I think that's how they would describe me but I may be presumptuous, so you should ask them.

Nils: No no, I do not think you are presumptuous. You don't have to be modest.

Jean: I am humbled by the fact that they are inspired and that they want to be part of the vision... Just yesterday I had somebody come to my office and say to me 'I want to create a foundation.' I also want SciMetrika to have a foundation of its own. So all of the work that we are doing we see it as improving lives. They may say I am inspiring to them but they are inspiring to me as well for wanting to be an agent of change in the world. We are a small company of 125–150 employees but even with our small size we can make a difference in the world and we are willing to take that on.

Nils: It sounds like you already have made a difference with the survey that you have implemented. I am humbled [by] the opportunity to be able to do this interview. I really learned a lot. It is inspiring to me as well

Jean: It's a lot of work, and I am not satisfied. We have a lot of work to do. If the story ended there I don't think that I [would] have accomplished much. So I am looking forward to doing more. To help create jobs.

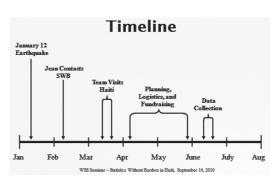


Fig. 1. Time line of SWB work (Ashley and Scheuren, 2010).

Nils: So maybe as a final question, what would satisfy you?

Jean: To see jobs created that live beyond me. Where there is sustainability. Where we have created a movement, like a snowball where it goes beyond me. After I am done here and even after I have passed away that this continues on... To create jobs.

Nils: I think we got all of the materials that we need. Again, I want to thank you for taking the time to discuss your time and experience. You have inspired me and I think that this will be an inspiration to many who read the article.

SWB and work in Haiti

In the time line which follows the basis events of the team I led are laid out, beginning with the January 12 earthquake, to the standing up of the survey in Haiti and the actual fieldwork in June. The assembly of an international team is covered in 2013 article in *Significance*.

The importance of the survey content was intended to make actionable the early work in responding the economic impacts of the earthquake. A snapshot was provided of earthquake early in the recovery period.

It was decided to use a Random Digit Dialing (RDD) of mobile phone survey following the earthquake. The reason why RDD was chosen is because it offers wider coverage of the Haitian population, efficiency (speed and cost), no interviewer travel requirements, centralized calling center, and because of the large amounts of population movement out of Port-au-Prince population center. More importantly there is a need for Capacity building (repeatable methods).

Recent trends indicate an increasing mobile phone penetration rates in the developing world. This is no different for Haiti. The mobile phone usage in Haiti breaks down to the following demographics. There are

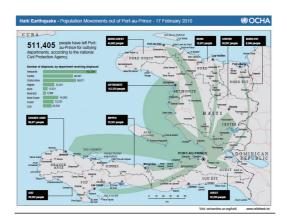


Fig. 2. Population movement out of Port-au-Prince (Ashley and Scheuren opt. cite.) (Colours are visible in the online version of the article; http://dx.doi.org/10.3233/SJI-130771)

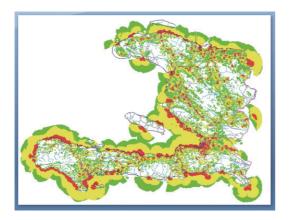


Fig. 3. Access to Cell Signal (Ashley and Scheuren opt. cite.) (Colours are visible in the online version of the article; http://dx.doi. org/10.3233/SJI-130771)

about 10 million people in Haiti (2009). Out of those people there are about 3.648 million active mobile phone subscriptions.

By looking at the data from the 2009 Fafo Survey of household penetration rate for mobile phone, there is a 67% penetration. The break down further to 87% urban and 50% rural household penetration.

The earthquake hit Port-au-Prince the hardest. Since Port-au-Prince is an urban city, the household penetration rate of mobile phones is extremely good.

Further support for using RDD of mobile phones is evident in looking at the characteristic of mobile phone usage. Mostly all of the mobile phone service is prepaid and the users are only charged for outgoing calls only. Mobile numbers stay active for 6 months without minutes and still can receive incoming calls at no cost. An important note is that many users own multiple phones, which can lead to a potential problem.

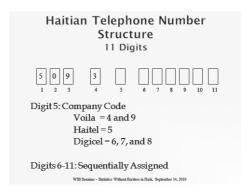


Fig. 4. Haitian Telephone Number Structure (Ashley and Scheuren opt. cite.)

Using RDD for mobile also makes sense based on how the phone numbers are assigned in Haiti. The way the Haitian phone number is structured is a 11 digit number. The 1–4 is the same throughout all the mobile numbers. Then each of the mobile providers have a code for the 5th digit in the number and the randomly digit number would be from digits 6–11. Bottom line, there were 2,649 randomly selected numbers that was dialed. Out of which, there were 796 completed interviews (30 percent). If the response rate was adjusted for inactive numbers, there is a 50% response rate.

What did we learn?

The survey did provide a measure of economic impact. The employment rate before the earthquake was at 51%. After the earthquake, only 29% of the respondents reported having gainful activity. Also only 39% of the households had no adults engaged in any gainful activities.

So, a lot more needs to be done for Haiti to recover.

About the interviewers



Nils Nelson is originally from Salt Lake City, Utah and now lives in Washington, DC. He works at Ernst and Young, conducting statistical tax studies. He graduated from Utah State University with a BS in Mathematics.



Daniel Lee is from Silver Spring, Maryland. He currently works at NORC, at the University of Chicago as a graduate research assistance. He has a B.S. in Biology. Daniel is also enrolled in the George Washington University's Survey Design and Data Analysis program.