Visualiza Eye Care System Case Study

Submitted by

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Introduction

Over the past decade, Visualiza, a leading eye hospital in Guatemala, has achieved substantive growth within its own institution as well as expansion to assist other eye care institutions in Guatemala and Central and South America. While many institutions enhance their internal capacity through developing specialist services, secondary hospitals and outreach programs, very few institutions invest their human and financial resources to enhance the program effectiveness and efficiency of other institutions, hereinafter termed external capacity building:

External capacity building is understood as an interactive process whereby an institution utilizes its paid staff to engage with and support the development of other institutions with which it has no financial connection. Therefore, it is a structured, planned and altruistic approach to help other institutions grow and improve.

To better understand how Visualiza became one of the relatively few institutions in the world that was able to achieve and maintain this level of success both internally and externally, and how the two processes worked dialectically over time, the Seva Foundation commissioned Scott Burg, an independent research analyst, to develop a case study report. He was asked to closely examine some of the factors and motivations that went into building and sustaining Visualiza and its network, and in particular to understand some of the key characteristics of its external capacity building (also known as mentoring) model. Results from this case study report will be used to assist other eye care clinics and members of the international eye care community interested in external mentoring or capacity building.

The objectives of this case study are to:

- 1. Understand Visualiza's own experience building its internal capacity
- 2. Understand Visualiza's process and benchmarks for external capacity building
- Understand the impact of external capacity building on Visualiza's internal operations
- 4. Gain clarity on the points/themes that should be assessed more deeply through future conversations, research and field visits

Methods

Burg made two trips to Guatemala City, in May 2013 and December 2013, to interview Visualiza staff and physicians. In May 2013 Burg traveled to Visualiza clinics in Guatemala City and the Peten, and also interviewed a number of Visualiza's capacity building clients in Haiti, Honduras and Peru by phone.

In December 2013, Burg attended a strategic planning meeting hosted by the International Eye Foundation (IEF) at the Visualiza clinic in Guatemala City. While there, Burg interviewed a number of INGO representatives and other Visualiza physicians and staff. Burg also interviewed INGO representatives by phone. For a list of key informants, please see Appendix A.

Interviews were conducted using a scripted interview protocol developed in collaboration with Seva staff. Interviews in Guatemala City and the Peten were conducted in person. All but three of these interviews were conducted in English. The others were conducted in Spanish and translated. Please see Annex B for the interview protocol. All interviews were digitally recorded and transcribed.

Background

Visualiza is a Guatemala-based social enterprise, which operates clinics providing high-quality, inexpensive eye care through a high-volume model. Visualiza's Eye Clinics service Guatemala City and its surrounding area (population approximately 2 million) and the Department of the Peten to the north, (population of approximately 500,000). A third clinic in the city of San Marcos is currently under construction. In 2013, with only 2% of the nation's ophthalmologists, Visualiza, through its Guatemala City clinic and its Pescatore clinic in San Benito, performed over 20% of all cataract surgeries in Guatemala. Visualiza employs over 55 people, including five ophthalmologists, two optometrists and a dentist. Visualiza also has a full optical shop offering same-day service on most prescriptions.



Figure 1: Location of the three Visualiza Clinics

Visualiza's Guatemala City clinic opened in 1995 and now services close to 45,000 patients per year. Visualiza operates a not-for-profit social services arm and a private practice section to ensure financial sustainability. The social service section provides a full range of eye care either for free or heavily subsidized for persons with few resources. 20% of patients served by Visualiza are private patients, while 80% have their care subsidized and pay minimal fees. 10% of those are very low-income patients whose care is completely free of charge.

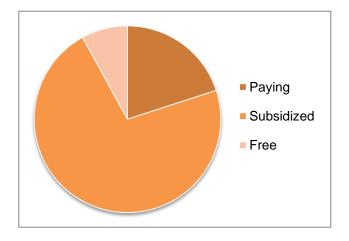


Figure 2: Pie chart showing breakdown of paying, subsidized and free patients at Visualiza

Visualiza is the first eye care institution of this type in Latin America. Visualiza works closely with many major international non-governmental organizations (INGOs) interested in eye care, including the International Eye Foundation (IEF,) the Seva Foundation, the International Association to Prevent Blindness (IAPB), ORBIS, and Vision for the Poor.

Visualiza's two clinics perform over 50 outreach activities each year to poverty-stricken areas near Guatemala City and various remote locations around southern Guatemala. These outreach programs have examined close to 36,000 patients. Patients needing more advanced treatment that cannot be performed from a remote location are referred to the clinic for additional treatment. Visualiza is also the only institution providing eye screening of children aged 5-15 reaching approximately 20,000 children a year in school programs near Guatemala City.

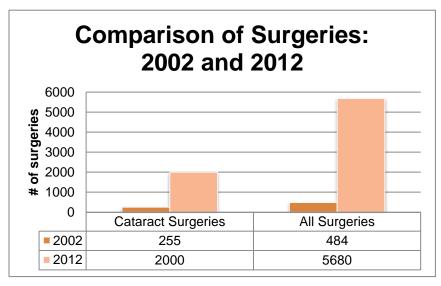


Figure 3: 2002 by 2012 Comparison of cataract and all surgeries performed by Visualiza

From 2002-12 Visualiza experienced substantial growth in services and outreach. Outpatient exams increased 621% from 6,312 in 2002 to almost 40,000 in 2012. Cataract surgeries increased 781% from 255 in 2002 to almost 2,000 in 2012. All surgeries increased 761% from 484 in 2002 to 5,680 in 2012.

Visualiza Case Study

History

In 2002, brothers Mariano and Nicholas Yee (both ophthalmologists) were running a small, two-room private clinic out of a storefront in Guatemala City, in addition to conducting charity work at the Vincent Pescatore Eye Clinic in the northern rural region of Peten. The brothers were eager to expand their services to include patients who had little or no access to eye care services, but neither had the technical knowledge nor financial resources to implement their idea. To this point the Yees had received critical financial and technical support for their work, especially in Peten, from INGOs such as the Christian Blind Mission (CBM), Vision for the Poor, and the Lions and Rotary Clubs International.

To assist in securing additional support, representatives from CBM invited Mariano Yee to a regional eye care workshop held in Costa Rica. It was there that he met David Green, a social entrepreneur who had helped to develop high-volume, quality eye care programs that were both affordable and self-sustaining, including the Aravind Eye Care System in Madurai, India. Green strongly encouraged Mariano to consider development of a social enterprise model as a way to deliver the kind of eye care services that not only had a strong social impact but that was also financially sustainable

I suggested that they bring both their public and their private work under one roof. We created a spreadsheet that kind of modeled what it would look like to show if you have these many patients paying with this differentiated price. We also looked at revenue and expense models. In part through that exercise, they became convinced that it made a lot of sense. — David Green, Member of Seva Advisory Circle

Mariano returned to Guatemala to discuss Green's ideas with his brother Nicholas and wife and co-partner Kimberley. They all agreed that it was a direction they wanted to take.

Green had also suggested that in order to secure the necessary assistance for making this organizational shift, the Yees needed to expand their relationships within the INGO community. In part through contacts from Vision for the Poor, the Yees made connections with staff from the International Eye Foundation (IEF), an INGO experienced in working with eye clinics and hospitals around the world to become viable and sustainable social enterprises.

Over the next three years IEF and Vision for the Poor provided substantive technical assistance and financial investments to help transform the Yees' small practice into an operating social enterprise. Initially, Visualiza moved to a larger building, and built out and equipped a private and social side including an operating theatre. IEF helped them

develop a business plan to grow the clinics services and patient volume. Counselors were introduced to strengthen patient relations and increase surgical acceptance rates. The clinic incorporated the social side as a non-profit and renamed their service Visualiza

INGOs like IEF and Vision for the Poor believed that supporting the Yees in their endeavor could over the long run address major eye care access and efficiency issues not only in Guatemala, but in the larger Latin American region.

We (IEF) knew that we had to clear the table, where prior to 10 years ago there were only a couple of major groups in Guatemala providing quality eye care. These groups would compete against each other, and were also very inefficient. So the idea of a Visualiza was to say there needs to be somebody new coming in to do all of these things a little bit differently, build confidence, and then build an idea that could be shared with others in the region. — John Barrows, Vice President, Programs, International Eye Foundation

Funds were provided for Mariano and Nicholas Yee to travel to the Lions Aravind Institute for Community Ophthalmology (LAICO), part of the Aravind Eye Care System in India to learn firsthand about Aravind's social enterprise model, and to study advanced surgical techniques.

The trip to Aravind was transformational for both Mariano and Nicholas. This experience confirmed for Mariano that creating a social model in Guatemala and helping other clinics in Latin America, though potentially difficult, was part of their mission and held advantages beyond just ophthalmology.

When IEF told us that they were hoping to develop another clinic that combines both the private and social sides we said 'yes', because it was probably the first model in Latin America that would work like this. In the beginning it was hard for us, because we were the main barriers. We thought if we can help other people skip the problems that we had in the beginning, then why not? It's rewarding, and also you have more exposure to other INGOs. They (INGOs) will help you to continue your work, too, and develop yourself in other fields, not only eye care. If you are an institution like us, you want to grow in other fields, not only medicine. — Dr. Mariano Yee, Ophthalmologist, Visualiza

Building a social enterprise

Juan Francisco Yee, a brother of Mariano and Nicholas, first began working with Visualiza on a part-time basis in 2002, primarily responsible for administrative activities. After completing his degree in architecture in 2003, he and his brother Rafael designed the Vincent Pescatore Eye Hospital in the Peten, which had been funded mainly by

Vision for the Poor. The Pescatore Eye Hospital would ultimately be staffed by and become a legal entity under Visualiza.

When construction of the Peten clinic was started in 2004, Juan Francisco was asked to join the Visualiza clinic in Guatemala City as its full-time administrator. In order to supplement his knowledge of clinic administration, he enrolled in an MBA program in Guatemala, and also attended an eight-week medical administration course at LAICO in India on the recommendation of his brothers.

While Juan Francisco was somewhat familiar with the Aravind model, his experience there turned out to be the tipping point in his thinking. He came away with an appreciation of Aravind's innovative methods of staff retention and supervision, its sophisticated software data tracking system, its management of quality control and patient flow, and methods for working with local community leaders to enhance outreach activities. He began to envision how Visualiza could dramatically improve services and efficiency, while simultaneously reaching greater numbers of patients domestically and within Latin America.

After returning from Aravind, Juan Francisco quickly implemented a series of dramatic changes to Visualiza's clinic operations and practice. These included:

- Designing the first phase of its internal software system for capturing and tracking patient and physician data, such as age distribution, patient residence, complications, common diseases, place of referral, numbers of operations performed
- Instituting more efficient method for tracking patient medical records
- Formalizing procedures and protocols for conducting community outreach
- Improving internal accounting systems to better track clinic revenue and expenses
- Hiring full-time staff to manage patient flow and oversee human resources
- Implementing a plan for creating a low vision clinic (adapted from model seen at LV Prasad Eye Institute in Hyderabad)

Internal capacity building

To be a true leader in the local and regional healthcare market, Visualiza needed to instill more internal discipline and develop a system of corporate sustainability. To manage their rapid internal growth, the Yees realized that change had to occur in Visualiza's management structure, decision-making process and reporting systems.

Visualiza was growing faster than their ability to manage staff and control costs. There was no 'formal' chain of command within the clinic, and decision making amongst the brothers was often inconsistent and ineffective. Staff were unclear what was expected

of them, did not seem to be 'invested' in the mission of the organization, and generally were not held accountable for poor job performance. There was also no ongoing system of staff training or development, and turnover was high.

To assist in restructuring their internal operations, the Yees turned to a close friend and prominent management consultant from Guatemala City. He recommended the Yees enroll in a local MBA program to acquire the skills and knowledge necessary to more effectively run Visualiza as a business enterprise.

In addition to gaining business acumen, what attracted the Yees to this program was its emphasis on organizational cultures and values. The Yees realized that if Visualiza was to succeed as a social enterprise, it had to become more of an ethically driven organization. This meant developing and formally instilling a shared mission and vision, as well as strong inherent core values and ethical practices amongst physicians and staff. To Nicholas Yee these values represented:

... a combination of diligence, perseverance, loyalty and integrity. We wanted our staff to learn these values and use them in their jobs, with patients and with their co-workers. – Nicholas Yee, Ophthalmologist, Visualiza

To strengthen implementation of this organizational values system and to formalize hiring and training processes, the Yees hired a full-time Human Resources Coordinator. This hiring, in conjunction with the introduction of a value-driven training and performance evaluation system, resulted in improvements in clinic efficiency, cost control, and enhanced camaraderie and commitment amongst physicians and staff.

To further improve communications, day-to-day decision making, and strategic planning within their operation, the Yees also established a Board of Directors. Visualiza's Board consists of the three brothers and their management consultant colleague. Previous to the Board's creation, many management decisions were ad hoc and divisive. The Visualiza Board meets on a regular basis at least once a month.

Training and values

Influenced in part by their experiences at Aravind, the Yee brothers have made training for Visualiza's physicians and staff a top priority. Unlike Aravind, Visualiza cannot recruit staff from rural areas. For Visualiza, according to Mariano Yee, "Training starts at zero."

With a formal human resources system now in place (combined with recent completion of an onsite training facility), Visualiza has expanded training and workshop opportunities for everyone in the organization. Visualiza's HR Coordinator has

developed individual workshops and staff retreats in collaboration with local training consulting firms.

With support from INGOs such as IEF and Seva Foundation, Visualiza has sent ophthalmologist recruits to India to learn advanced cataract surgical techniques and other staff for training in management and administration. These enhanced training opportunities have helped address the difficulty in finding and retaining appropriately trained physicians and staff to work at Visualiza. This training also allows others in the organization to more freely delegate responsibilities, thus improving workflow and overall clinic operations.

Onsite training facility

In late 2013 Visualiza finished construction of an onsite training facility. The primary purpose of this facility is to train Visualiza staff, as well as those from other clinics in Latin America. As an IEF Regional Demonstration Center, Visualiza had been hosting workshops for mentees in the region for a decade. Those didactic presentations, however, took place in a hotel while the hands-on sharing and observation occurred at the clinic itself. With a grant from the Lavelle Fund for the Blind, the Yees were able to complete the build out of a training facility on the Visualiza campus.

By attending training workshops at the clinic itself, participants experience first hand how a practicing clinic conducts high-volume, high-quality work. In this manner, participants can realize the potential of how clinical and administrative improvements might look in their own facilities. Centralization of Visualiza's internal and external training operations have resulted in lower overall training costs, less redundancy in training activities, and increased volume of training participants. It has also improved the quality of employee job performance and aided in retention.

The facility allows for clinical teams from outside Guatemala to be brought together for training at a single time (rather than having to schedule separate trips for each). Crossfunctional training can be much more easily accommodated. Clinic staff from different countries can share ideas or work in teams to address unique problems. Conducting this type of onsite collaborative training has strengthened Visualiza's position as a regional catalyst for external capacity building while simultaneously providing growth and stability for its internal operations.

Juan Francisco envisions a variety of different revenue-generating courses that could be offered, benefiting staff and physicians in Guatemala and other regions of Latin America:

I was talking with Vision 2020/Latin America, for example, about offering a course for administrators. In Latin America, there are no courses just for advanced administrators.

We are also going to give courses in how to sterilize. All the hospitals can send their own staff, and we can help to maintain quality of the service here in Guatemala as well.—Juan Francisco Yee, Administrator, Visualiza

Juan Francisco believes that over time Visualiza could host trainings for physicians and hospital teams from all over the world. He would also like to work with the Guatemalan Ministry of Health to conduct training for its employees. Currently, there are no agencies within Guatemala providing eye care related training for government healthcare workers.

Visualiza has already co-hosted a number of important workshops with INGOs and regional eye clinics. In late fall of 2013, Visualiza hosted its first onsite training workshop in collaboration with IEF and PAHO for representatives from government eye hospitals in Costa Rica, El Salvador, and Honduras. In December 2013, Visualiza hosted a first-of-its-kind strategic planning meeting organized by IEF, between eye care INGOs and eye care clinics to establish a framework for collaboration and partnership within Latin America.

In 2014, Visualiza organized additional training workshops for mentee clinics and other interested healthcare organizations within the region. These workshop and training programs could ultimately provide another source of revenue for Visualiza, modeled in part on the success of workshop activities at LAICO in India.

Software system

By strengthening its organization's internal capacity, Visualiza has become the model of a modern day data-driven organization. Before implementing its own internal software tracking system in 2006 all critical patient and physician data was collected by hand. Since nothing was automated, Visualiza staff could not accurately determine the number of patients served, their ages, whether it was their first or follow-up visit, what kind and the number of surgeries performed, or any past medical conditions or complications.

To rapidly move from analog to digital, Juan Francisco and a local computer engineer have been overseeing the design and implementation of Visualiza's software system. In building features and functions, Juan Francisco has adapted bits and pieces from other clinic data systems he has seen during his many trips abroad. This philosophy ('I copy what is good') is consistent with Visualiza's overall approach for adapting best practices from other clinics.

Now that the software is in place, improvements have been dramatic. Clinic operations data, which was previously recorded by hand, is now captured electronically at all key touch points during the patient visit (e.g., registration, triage, consultation, surgery,

follow up). Patient information is more accurate and timely. Methods for tracking the time it takes a patient to move from one clinic station to the next (a system function discovered and adapted by Juan Francisco while he was in Argentina) has greatly improved patient flow. Delays are minimized, more patients are seen, and the overall patient experience is enhanced.

Visualiza physicians and members of its Board now make informed strategic decisions based on accurate/real-time operational and financial data. A very recent upgrade to the software is a benchmarking function for clinic staff and physicians. Every clinic employee is now responsible for meeting certain quantitative and qualitative goals based on their job function and responsibilities. Based on self-report and other informational data, the software can track a staff member or physician's progress in meeting stated goals. Rather than being seen as a draconian measure, this benchmarking function has resulted in better communication between staff and administration, more productive problem solving, and improvements to clinic operations and the bottom line.

Recognizing the software's potential, the system has been installed in other clinics throughout the region. System requirements are relatively low end, meaning that the financial outlay is relatively low for other clinics looking to install the software. Though not formally a purchasable commodity at this point, Juan Francisco recognizes that Visualiza's software system does have the potential to be monetized. He envisions that this system could also be installed in eye hospitals around the world as a tool for better internal data capture and benchmarking. Clinical and financial data could also be easily extracted from the system and shared with other hospitals, INGOs, and other healthcare organizations.

Outreach activities

Visualiza's data intensive infrastructure has also improved the quality of the clinic's outreach operations. After returning from Aravind, Juan Francisco instituted a series of formal protocols for planning and implementation of these activities. Previous to these protocols, Visualiza's outreach coordinators did little advance preparation before conducting screenings in local towns or schools. Much of the activity at these sites was haphazard, staff was ill prepared, no patient data was collected, and only a small fraction of the potential patient population was being reached. Visualiza had no way of knowing which patients came to their clinic as a result of a referral from an outreach activity. Seva Foundation began to support a more systematic approach to outreach.

Now we have steps. We have a document detailing all the things that we have to do before the camp, in the camp, and after the camp. We also know what data we have to collect, and have a system for collecting it. – Carlos Bal, Outreach Coordinator, Visualiza

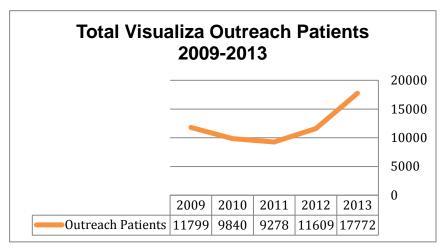


Figure 4: Visualiza data of total outreach patients (from both Guatemala City and Peten Clinics from 2009-2013

Outreach coordinators can now carefully plan each individual community screening event or intervention aided in part by the software's tracking and scheduling functions. Local leaders or decision makers (e.g. mayor, clergy, school principal) are contacted in advance of an event to ensure buy-in, advance promotion, facilities, and transportation.

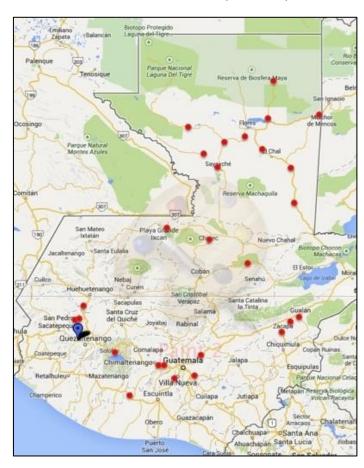
Targets are set for each screening intervention, such as how many people should be screened. Data is collected on how many cataracts are diagnosed, how many post-screening surgeries are scheduled, and what other diseases were picked up.

Determination is also made on how many of the patient surgeries will be free and how many will be paid for by a particular municipality. All of this planning and communication data is entered into the system before the outreach commences.

Visualiza staff carefully analyzes post-intervention data to examine whether the maximum numbers of age-appropriate persons are being screened at each site, as well as assessing overall time and duration of site screenings.

Resulting numbers can impact changes in how an intervention is scheduled, coordinated and marketed.

Figure 5 (right): 2013 Outreach sites for all Visualiza Clinics



For example, if this outreach was meant to find out cataracts or diseases, I look for the age distribution and also how many patients we saw that day. After looking at the data I'll talk to the camp and say, 'okay, here's this age distribution, why do we have more patients between 21 and 40 if we are looking for candidates for cataract surgery?' - Juan Francisco YeeMore efficient data capture has also resulted in a more accurate count of patients referred to the clinic as a result of outreach interventions. Having these data has resulted in improved onsite care, treatment and follow-up. It also helps outreach planners to identify any gaps in service and to plan for improvements.

Increasing Access to Eye Care in Guatemala

Visualiza has initiated a number of measures aimed at increasing access to eye care in Guatemala. These activities will not only expand Visualiza's geographic presence and visibility, but grow the clinic's referral network and increase overall patient volume and revenue.

Low Vision Services

Partial vision loss that cannot be corrected causes a vision impairment known as low vision. A person with low vision has severely reduced visual acuity, or contrast sensitivity, or a significantly obstructed field of vision -- or all three. Visualiza is providing much needed services for patients with low vision through creation a Low Vision Clinic in Guatemala City. Visualiza's Low Vision Clinic was designed and is currently managed by Kimberley Wiedman-Yee, a trained optometrist who was instrumental in the establishment and growth of Visualiza since its inception.

The idea for the Low Vision Clinic came about in part as a result of a visit by Juan Francisco to the LV Prasad Eye Institute in Hyderabad, India, where having seen how the Institute provided low vision services to poor patients, became convinced that Visualiza should do likewise. Visualiza's Low Vision Clinic has since become a service model for other eye clinics throughout Latin America.

New clinic

Visualiza's two clinics in Guatemala City and the Peten currently serve patients in the country's south central and northern regions. There are very few vision services available for residents in the country's southeast regions. To address this scarcity and to continue the expansion of their domestic operations, Visualiza is planning to open a third clinic in the southern coastal city of San Marcos sometime in late 2014.

Optical shops





Figure 6: Interior and exterior of Visualiza's first vision center in Guatemala City

Visualiza has recently opened two of four planned optical shops in Guatemala City. A former optical store manager from Guatemala City, who also has experience in marketing, has been hired to oversee the stores' operations.

Local optometrists will be hired on a part-time basis to staff the optical shops. In addition to providing basic eye care screening services and selling glasses, the shops will also serve as referral centers to the clinic. Having these local referral 'networks' could increase Visualiza's patient flow and revenue generated from subsequent surgeries and dispensing.

Screenings at Private Business

Visualiza staff has also begun conducting free eye screenings for employees of private businesses in Guatemala City. By networking at local clinic benefit functions (e.g. golf tournaments) and other community gatherings, Visualiza staff and physicians have come in contact with administrators of many key businesses within the city. One recent successful screening took place with employees of Guatemala's largest electric utility company. Even though the screenings are free, the clinic makes revenue on follow-up referral activities, such as sales of lenses and glasses, and any ophthalmic surgical procedures. Staff also hopes that conducting more of these types of screenings will increase the private side's patient volume through overall patient satisfaction and positive word of mouth.

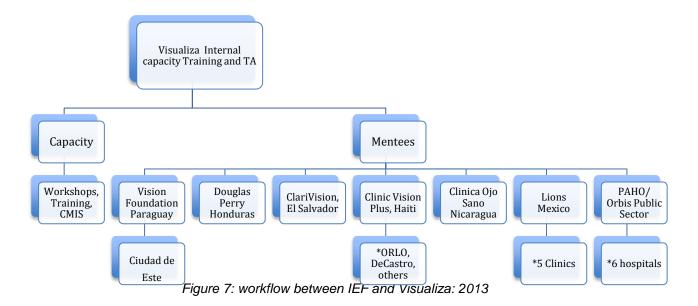
External capacity building

In a relatively short period of time, Visualiza has achieved a reputation as a leader for systematically building the administrative and clinical capacity of eye clinics within Latin America. Within the last 3-4 years, this external capacity function has become an integral and growing part of Visualiza's overall operation.

Visualiza first entered into capacity building projects around 2006, when it was designated as an 'IEF Regional Demonstration Center' to provide workshops and backstop new clinics in the region. When first being mentored, Visualiza staff had never considered the possibility of working with other eye clinics. However, once Visualiza had established its own public/private model of eye care delivery, they began to realize that with support from other INGOs, they had the opportunity to create something extremely unique in Latin America. Mentoring by IEF and visits to LAICO by Mariano and Nicholas Yee also provided first-hand evidence of the benefits of external capacity building.

The Yees have been motivated to do this kind of work in a number of ways. They believed early on that it was their mission to help other struggling eye clinics learn from their efforts, and to help them to not make the same mistakes they had. They felt that taking on this kind of work was both personally and professionally rewarding. They wanted to give others the same kinds of opportunities they had been given (e.g. mentoring, funding support by IEF, LAICO, Vision for the Poor and Seva).

They also believed that continued exposure to global INGOs provided opportunities for growth and experience for their own clinic to become more efficient and begin expanding into other areas outside of medicine. They envision Visualiza as a model within Latin America that others can begin to scale and replicate.



Presently, Visualiza's external consulting expenses are either subsidized by INGOs such as IEF, Seva and Vision for the Poor, or absorbed by the clinic itself, through revenue from the clinic's private side operations. The Yees concur that as the consulting side of their operation continues to expand, there will be more pressure to find other funding sources to support it. One of the options being discussed includes charging certain high volume, financially stable clinics or hospitals directly for services. Another option would be diversifying the type of client base served. They would not, however, under any circumstances consider charging clients from countries who have limited resources.



Figure 8: Location of Visualiza (red) and their six GSI-supported mentee hospitals (yellow)

Whether to charge for our services depends because, for example, if we go to Haiti, where they have nothing, and have so many needs, and we charge them, then we will feel horrible. But if, for example, a group with money asks 'can you do this research?' we wouldn't mind charging. – Juan Francisco Yee

Learning From Others

Many improvements made to Visualiza's patient management, operational flow, clinic administration and software functionality have been the direct result of systems they have adapted from other clinics. For Visualiza, external capacity building presents an opportunity for continuous re-evaluation and assessment of its own internal systems. Learning and adapting from others is a guiding principle for how Visualiza effects improvements and expansion of the administrative and medical sides of its operation. Since 2006 an active opportunity for such learning has come from Visualiza's participation in the Global Sight Initative (GSI), a coordinated effort that aims to produce

an additional one million cataract surgeries during the year 2020 and annually thereafter. Through GSI, Visualiza is exposed to practices from some of the world's most accomplished eye hospitals and also shares what it is learning.

Sometimes when you are traveling and you are talking with other people, you learn many new, different, and fresh ideas. So, you start thinking, we are here not only to help them, but also to help ourselves, in our own setups. That's why we continue to do this work. – Juan Francisco Yee

Visualiza realizes that introducing even the smallest change can make a huge difference in efficiency and quality of patient care. None of their internal processes are immune from change. Visualiza does not randomly implement change, but rather through observation and data analysis, carefully studies the potential impact of any change they plan to introduce.

We have to see that whatever we decide to change works in our setting. Just because something works in one place, does not mean it will definitely work here, but we have to try. Sometimes we have to refine something to make it work here. – Juan Francisco Yee

One of the primary challenges for Visualiza in conducting external capacity building was learning how to adapt different pieces of a social model created in India to fit Latin America's unique economic, clinical and cultural requirements for implementing healthcare in that region. Some of these unique characteristics include:

- A higher physician salary structure
- Fewer staff with advanced degrees
- No formal training programs for eye care technicians or assistants
- A lower percentage of physicians with advanced medical training
- More self-selective private patients -private patients often want to see a specific doctor, and a specific appointment time
- More expensive land acquisition costs; clinic space tends to be rented rather than owned. There is less opportunity for construction of new facilities
- The importance of establishing personal relationships when conducting business and securing contracts
- Patient expectation of exclusivity (differences) between private and public clinics.
 There are greater physical-design differences between the respective waiting rooms in this region than in India

Affecting change in Peru

With support from INGOs such as Seva and IEF, Visualiza has conducted capacity building activities with clinics in Peru, Nicaragua, Haiti, Mexico and Honduras. One of

its most successful engagements has been with the DNJ clinic in Lima, Peru. Stemming from a Sustainability Workshop conducted by IEF and Visualiza in Paraguay in 2009, DNJ became a mentee of the Visualiza team. Juan Francisco and Alberto Lazo, the Administrative Director of DNJ, have evolved what first began as a mentormentee relationship between Visualiza and DNJ into a more expansive regional partnership.

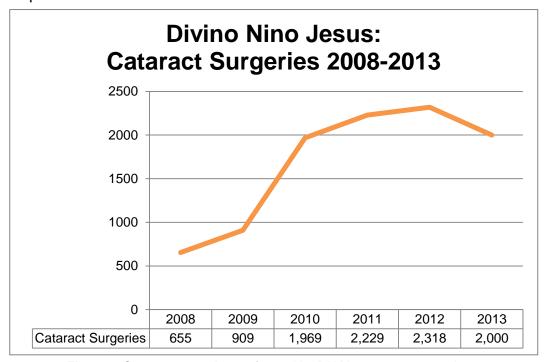


Figure 9: Cataract surgeries performed by DNJ between 2008 and 2013

As a result of these mentoring activities, DNJ experienced a doubling of key clinical indicators in less than two years. Led by Mariano Yee, DNJ physicians upgraded their surgical techniques in cataract, glaucoma and oculoplastics. DNJ also initiated its first community outreach activities and introduced counseling services to their patients. Two DNJ staff sit on the Ministry of Health's eye care planning committee, DNJ led Peru's Rapid Assessment of Avoidable Blindness (RAAB) study, and was supported by IEF to participate in the Prospective Review of Early Cataract Outcomes and Grading (PRECOG) cataract outcomes study in Peru.

Soon after completing work with Visualiza to improve its own clinical and management operations, DNJ saw its role gradually shift from mentee to mentor. Alberto Lazo accompanied IEF to four hospitals in Peru to provide much needed technical assistance. DNJ has also received support from Seva Foundation, CBM and Orbis International (a large eye care INGO supporting training and capacity building worldwide) to conduct capacity building engagements at other clinics in Latin America. Alberto Lazo notes the parallels between these engagements and their own experience with Visualiza.

Now we are one of the principal CBM programs for provisional blindness in South America. We have got experience in the last three years to visit and do a kind of technical visit, sent by CBM to Bolivia, to Ecuador, to Brazil. These have been very interesting projects. We have achieved in Peru, I think in two of those four projects a way of working very similar to the relationship we had between Divino Niño and Visualiza. - Alberto Lazo, Administrative Director, DNJ

DNJ and Visualiza have collaborated on a number of regional capacity building workshops and are actively exploring ways to partner more directly to provide capacity building support to individual clinics within Latin America. This growing relationship demonstrates how mentees can quickly become change agents within their own countries, and become equal partners with their former mentors.

Challenges for external capacity building

Some of the challenges facing Visualiza in running its external capacity operation have been lack of time and lack of staffing. Currently, Juan Francisco and a consultant engineer are responsible for managing most of Visualiza's external consulting activities. Up until late 2013 Juan Francisco managed external consulting activities in addition to his responsibilities as full-time Practice Administrator. To address this issue, Juan Francisco has since been relieved of his administrative responsibilities and has taken over consulting operations on a full-time basis. Douglas Reacher, the former administrator of the clinic in the Peten, is now Practice Administrator for the clinic in Guatemala City.

Giving Juan Francisco full-time responsibilities for managing external consulting reaffirms Visualiza's commitment to continue to grow and scale this side of its business. Juan Francisco is working closely with Visualiza's Board to develop a strategic plan to guide these activities for the foreseeable future. He is also developing a formal prospectus of services and guidelines that can be marketed to potential clients. Juan Francisco believes that Visualiza's success with external capacity building will bring more opportunity. He feels confident that the systems they are developing will provide a stable foundation for growth.

Both Juan Francisco and Mariano Yee believe the biggest challenges for capacity building going forward will be funding, equipment and personnel. Many of their external clients do not, themselves, have the resources to expend on these activities. As such, the Yees hope that their INGO partners will continue to help support these operations.

Mariano Yee is not scared of growing too fast. For him, growth is a necessity from which you can learn and benefit. Like his brother, he believes that by building a sustainable organization both internally and externally Visualiza is prepared to respond

to all different types of growth and opportunity. For the brothers, not growing is akin to stagnation.

The moment you feel comfortable is when you are ruined. It is better to have opportunities. Opportunities give us room to grow and get better. We have been preparing ourselves for growth. That is why we went for the MBA. To grow, we have to be solid ourselves. We have the systems in place; change can be implemented.

– Mariano Yee

Changing relationships with INGOs

The Yees recognize the important role INGOs have played in the establishment and growth of Visualiza. All of the brothers spoke glowingly of the training, financing and general support that INGOs such as IEF, Vision for the Poor and Seva have provided, and continue to provide, to Visualiza as it enters a new phase of its development.

They see continued collaboration with the INGOs in mentoring and support of other clinics in the region. They acknowledged, however, that Visualiza has grown to a point where they are now capable of providing more integrated kinds of capacity building support, and as such, new opportunities are possible.

We are doing things that INGOs used to do. In the beginning we were learning. We received a lot of work and support from IEF and Seva. Now that we are capable of doing more, INGOs rely on us. We have proved that we can work together. We know the language of the people. We see good opportunities for expansion or responsibilities and activities with INGOs. – Mariano Yee

Juan Francisco believes that it is important to develop and support mentoring capacity amongst clinics in the region as a means of ensuring long-term service capacity and sustainability. He worries that a dependency on INGOs outside the region that may not understand the language, culture or unique logistical concerns could serve as only quick, part-time solutions, with no sustainable after effect.

It is necessary to build regional capability and strength. We have to develop people to mentor who are in the region. For others who come in from outside we must ask, what happens when they are gone? Who will provide follow up? – Juan Francisco Yee

Visualiza leadership is committed to continuing to collaborate with INGOs on capacity building activities within the region. The INGOs and Visualiza recognize that there are limits to what any small clinic can accomplish. INGOs have a history, familiarity and maturity that clinics like Visualiza and DNJ do not have. They understand that certain capacity building engagements and discussions may be best left to the INGOs.

There are some topics that are very crucial that only someone with more experience than I have can deal with. The INGOs should be dealing with the more sensitive political issues. We need to gain more experience. We need to mature. We are quite young. We feel we have developed a lot, but the maturity and age we need to be is at another level. - Alberto Lazo, DNJ

As Visualiza continues to expand the breadth and scope of their external consulting operations within Latin America, it is clear that the nature of the relationship between them and the INGOs is shifting. The INGOs themselves recognize that with Visualiza's increased presence in the region, a reassessment of their traditional mentor-mentee relationship may be in order.

They (Visualiza) have this new confidence in the region so I think the relationship is a little bit open to redefining. Maybe there are still some areas that they need some help for sure which are fund raising for these activities for instance, and possibly the whole idea of jointly organizing on a larger scale country or region. How do we organize on a country region level to really expand us out rather than us just being one or two places at a time? That is maybe where the shift might be and then, of course, you just need the person time to be able to do all these things because that is one of the primary constraints. — David Green

Similar to the shift experienced in the relationship between Visualiza and DNJ, the relationship between Visualiza and the INGOs has changed from former mentee to near partner status. In many cases Visualiza and DNJ have shown that they are fully capable of providing technical assistance to individual partner clinics either on their own or as part of collaborative team with the INGOs.

In many ways Visualiza is very much a partner. They have been that way for some time. It takes a couple of years to roll out one of these projects. It takes a lot of coordination just to hold the workshop and then to follow up on that. We can't do it ourselves. – John Barrows, IEF

INGOs in the region are approaching clinics like Visualiza and DNJ to collaborate in new and exciting ways. Orbis has contacted Visualiza to collaborate on providing technical assistance to a public hospital in Haiti. Seva is negotiating with Visualiza to become a lead mentor institution as part of their Global Sight Initiative activities in Latin America. Clinics in the region are beginning to independently contact Visualiza for capacity building assistance.

Juan Francisco would like to see better collaboration amongst the INGOs working in Latin America. He believes it is important for INGOs to jointly leverage their unique skills and experience to address their common goals. He feels that too often INGOs

work in isolation and frequently do not share information on projects underway in the same country.

The INGOs themselves understand that the changing relationships with former mentees like Visualiza are delicate and will need to evolve over time. They recognize the need for flexibility and patience as these shifts take place.

Sometimes we (INGOs) don't know how can we help them (clinics) or how can we approach them. I think it's a matter of their wanting to reduce redundancies and make it a much more efficient process. Funding, relationships, facilitation, exposure are probability the main areas I'd say, nothing surprising there. - Raheem Rahmathullah, Sustainability Director, International Eye Foundation

Conclusion

Visualiza's leadership understand that in order to deliver and sustain high quality eye care, not only in Guatemala but within the larger Latin American region, they must continue to initiate activities that strengthen their organization to help better fulfill its mission. Through a combination of education, training, experience, and personal vision, Visualiza has grown from a small two-room clinic to one of the few institutions in the region able to sustain a relatively high volume, affordable, social enterprise service model, while simultaneously embarking on an increasing number of high impact external capacity building activities. Visualiza continues to grow and sustain both its internal and external operations despite challenging financial and cultural barriers.

Visualiza has achieved, and in many cases exceeded, their own goals, by always being open to opportunity and by becoming a type of learning organization that constantly evolves and adapts to suit a constantly changing healthcare and global environment. Through the support of key international partners, Visualiza has been able to implement the kind of change and organizational philosophy necessary to move the institution towards the kind of culture, systems and practices they espouse.

Visualiza and their partners have illustrated that self-sustaining, affordable and high quality eye care can indeed be delivered to those individuals who are most in need by focusing on six key capacity building components:

- Mission, vision and strategy
- Governance and leadership
- Internal operations and management
- Program delivery and impact
- Finance
- Strategic partnerships

Appendix A: Interview subjects

The following individuals were interviewed for this case study report

Visualiza

- Carlos Bal Outreach Coordinator
- Douglas Reacher Clinic Administrator
- Andrea Recinos Development and Communications Manager
- Juan Francisco Yee Executive Director
- Dr. Kimberly Ann Wiedman, Optometrist
- Dr. Mariano Yee, Ophthalmologist
- Dr. Nicholas Yee, Ophthalmologist

Clinic and INGOs

- Alberto Lazo Legua Clinic Administrator, Divino Nino de Jesus Eye Clinic, Lima, Peru
- Dr. Diego Alberto Mejia Ophthalmologist, Centro deVision-Dr. Douglas Perry Clinic San Pedro Sula, Nicaragua
- Raheem Rahmathullah, Sustainability Director, International Eye Foundation
- Dr. Guerline Roney Ophthalmologist, Cap Hatien Eye Clinic, Haiti
- John Barrows, Vice President Programs, International Eye Foundation
- Dr. Ken Bassett, Program Director, Seva Canada
- Suzanne Gilbert, PhD, MPH, Innovation & Sight Program, Seva Foundation
- David Green, Member of Seva Foundation Advisory Circle

Appendix B: Interview protocol

INTERVIEW GUIDE FOR Visualiza Key Objectives and Questions

Case Study Goals: Scott Burg (lead)

- Understand Visualiza's own experience with being mentored
- Understand Visualiza process and benchmarks for mentoring and external capacity building
- Understand on the impact of mentoring/external capacity building on Visualiza's internal operations
- Gain clarity on the points/themes that we need to assess more deeply through future conversations, research and field visits

Key questions to meet objectives:

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Objectives	Questions and/or Activities
Understand Visualiza's own experience with being mentored	 Describe Visualiza's history being mentored by Aravind, Seva, IEF, IAPB and other organizations or individuals. What were some of the key accomplishments? How did the mentoring process impact their business (clinical, financial, staffing, training, outreach, etc.)? What elements did Visualiza adopt from the Aravind and other mentoring models? How would they have improved the process when they were mentored? How did they measure success? What were their benchmarks? How did this process influence Visualiza's decision to initiate mentoring/external capacity building? What were their motivations?
Understand Visualiza process and benchmarks for external capacity building	How and why did Visualiza decide to begin capacity building with other

Understand the impact of external capacity building on Visualiza's internal operations	,
4. Understand points/themes that need to be assessed more deeply through future conversations, research and field visits	 What do you think are the most important things for us to know about Visualiza's mentorships and external capacity building activities? Are there any additional points that you wish to share with us? What information do you wish you had before beginning the mentorship relationships? What do you hope to see included in this report/case for Visualiza and fellow mentors? How can outside agencies assist Visualiza develop systems to document their activities in a more regular fashion? How can Visualiza improve reporting to outside agencies?

Appendix C: Scott Burg bio

Scott Burg is currently a Senior Researcher with Rockman et al, a research and evaluation firm (www.rockman.com) in San Francisco. While at Rockman, Scott has conducted numerous studies on the impact of multi-sector partnerships and collaborative models on the development and delivery of education and health programs and community outreach. Scott has also designed and managed numerous qualitative studies evaluating the effects of formal and informal science and health education programs in schools, community-based organizations and museum settings.

From 1992 – 2001, Scott served as the Director for Research and Development at the American Academy of Ophthalmology (AAO). In 2012, Scott was asked by Seva to serve as faculty at Eyexcel Workforce Training Workshop at the Aravind Eye Center in Madurai, India. Scott has also conducted qualitative research studies on the impact of telemedicine interventions for diabetic retinopathy patients.

Scott has been a reviewer for the National Institutes of Health (NIH), Small Business Innovation and Research (SBIR) grant program since 1994. Throughout his career, Scott has consulted with a variety of health and education clients on market research studies, strategic planning, organizational development, and evaluation methodology.