

# salauno

**Country:** Mexico

**Sector:** Health Care

**IFC Investment:** \$2.2 million

2.3 million people in Mexico suffer from cataracts, making untreated cataracts the number one cause of blindness in the country.<sup>1</sup> With an aging population and a high incidence of diabetes, that number is only expected to rise.<sup>2</sup>

Globally, cataract surgery is the most frequently performed type of surgery, consistently producing excellent outcomes for patients. Success rates are over 95 percent and total recovery time can be less than one week, with some patients recovering vision in as quickly as a few hours.<sup>3</sup>

But in Mexico, people with cataracts had few options for surgery. In 2011, government hospitals offering free cataract surgeries were unable to accommodate the volume of patients, and waiting times could be as high as a year. Patients with other pathologies—such as diabetic retinopathy and glaucoma—had even lower access to care, leaving 70 percent of glaucoma cases undiagnosed and up to 7 percent of diabetic patients blind.<sup>4</sup> Private providers offered better quality and more timely services, but at prices that were too high for much of the population.<sup>5</sup>

Carlos Orellana and Javier Okhuysen founded the eye care provider salauno to create a cost-efficient, high-quality solution to this growing problem. salauno's mission is to "eliminate needless blindness in Mexico" by providing affordable and accessible eye care services to patients of all income levels. In the first five years since its founding in 2011, the company has provided eye care to over 230,000 people and grown from one surgical center in Mexico City into a network of ten mid-sized Diagnostic Centers with a staff of over 200, offering a range of services throughout the Mexico City Metropolitan Area and the broader Valley of Mexico.<sup>6</sup>

## BUILDING ON WHAT WORKS

### Developing an idea

In 2005, Orellana and Okhuysen were two aspiring entrepreneurs working as investment bankers in Madrid. Orellana, originally from El Salvador, and Okhuysen, from Mexico, were both trained as engineers but shared an ambition to one day build a company that could do well by doing good.



The two were inspired by a Harvard Business School case study they had read on Aravind Eye Care System in India. Aravind is a non-profit organization acclaimed for its ability to cut the cost of cataract surgery—an outpatient procedure that removes the eye’s natural lens and replaces it with an artificial lens—to a fraction of what other hospitals charge.

Despite the two engineer-turned-bankers’ lack of experience in eye care, they believed there was potential to take the model to the Mexican market and transform it into a commercial enterprise. Mexico is Latin America’s second largest market overall, had a favorable policy environment, and had a particularly large unmet demand for ophthalmology services as well as the highest prevalence of diabetes in the world.<sup>8</sup> At the time, government hospitals performed an estimated 67 percent of cataract surgeries, non-profit hospitals 11 percent, and private practices 22 percent.<sup>9</sup> Okhuysen and Orellana felt that they could carve out a significant market share if they could drive costs down and guide patients from diagnosis to health outcome at a very large scale.

For the next few years, the entrepreneurs worked on their business plan for a private eye hospital while holding on to their day jobs and other pursuits. In December 2010, Orellana finished his master’s degrees and Okhuysen left his job in private equity. They traveled to India for a six-week course at the Lions Aravind Institute of Community Ophthalmology, a university founded by Aravind, so that they could learn more details about Aravind’s business model. When they returned, Orellana and Okhuysen set up offices in Okhuysen’s apartment in Mexico City, hired their first employees, and started preparations for **salauno**’s pilot clinic.<sup>10</sup> In August 2011, with close to \$1 million of their personal savings, Orellana and Okhuysen opened the first **salauno** surgical center in Mexico City.

### Attracting and Developing Human Capital

Unlike Aravind, **salauno** did not have a ready supply of affordable and qualified labor. Few ophthalmology graduates in Mexico had the specialty required to perform cataract surgery and most preferred to develop or join

### THE ARAVIND BUSINESS MODEL<sup>7</sup>

Aravind is renowned for its ability to provide high-quality eye care at low prices. Key components of the model include:

- Quality, patient-centric care
- Hub-and-spoke structure
- Doctor and technician training
- Efficient processes that maximize facility usage and surgeons’ time
- Cross subsidization of fees and partnership with government
- Lens manufacturing



private practices, work for a government hospital where they would receive government insurance and other benefits, or work for a nongovernmental organization (NGO) that allowed them to have a private practice on the side.<sup>11</sup>

**salauno** offered doctors a competitive salary, but as a start-up, was unable to offer the same benefits as its government-sponsored competitors. The company initially attracted doctors by giving them the opportunity to learn a new surgical technique not used by other Mexican providers and to improve their skills with a high volume of surgeries—up to 500 per year, against the 100 they might



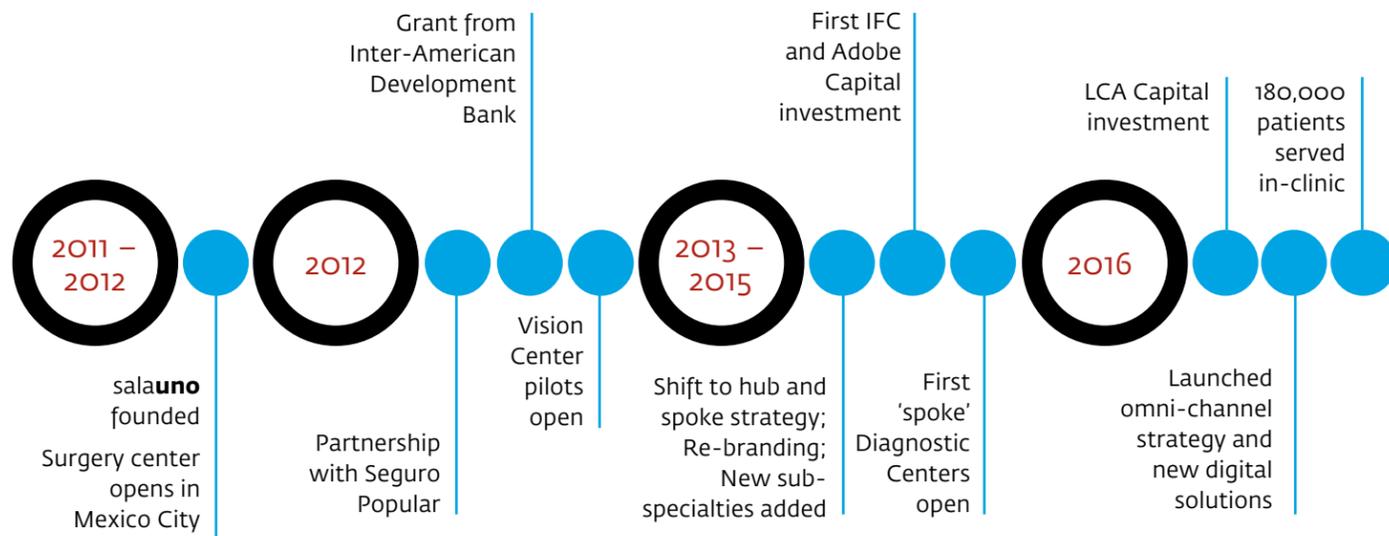
## salauno's Value Chain

### An Overview of Challenges and Solutions

#### Value Chain

	Procurement & Product Development	Distribution	Marketing & Sales	Customer Service
Challenges in Delivering Low-Cost Eye Care	<ul style="list-style-type: none"> <li>• Expensive lenses</li> <li>• Lack of qualified staff</li> </ul>	<ul style="list-style-type: none"> <li>• Hard to reach rural areas</li> <li>• Cost to build new medical facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Low awareness of cataract surgery</li> <li>• Limited purchasing power</li> </ul>	<ul style="list-style-type: none"> <li>• Long wait times at government facilities</li> </ul>
salauno's Solutions	<ul style="list-style-type: none"> <li>• Sources low-cost lenses from Aurolab</li> <li>• Trains and accredits doctors and nurses</li> <li>• Assigns staff tasks by skill level to optimize efficiency</li> <li>• Uses innovative, low-cost surgical methods</li> <li>• Expanded service offering</li> </ul>	<ul style="list-style-type: none"> <li>• Set up partnerships for outreach camps</li> <li>• Created smaller Diagnostic Centers</li> <li>• Developed tele-diagnostics</li> <li>• Partner with government and NGOs</li> </ul>	<ul style="list-style-type: none"> <li>• Raises awareness through community, NGO, and physician partnerships</li> <li>• Leverages digital marketing and referral program</li> <li>• Collaborates with financial institutions and programs that subsidize treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Developed efficient facility design and staffing model</li> <li>• Offers online appointment scheduling</li> <li>• Maintains patient contact through mobile applications</li> <li>• Monitors patient experience through KPIs</li> <li>• Established pharmacies and optical shops within facilities</li> </ul>

**Figure 1: Key Milestones in salauno's History**



perform in private practice.<sup>12</sup> In addition, doctors received bonuses for meeting collective goals relating to the company's social mission.

Because nursing programs did not offer an ophthalmology specialty, Mexico also had a shortage of qualified nurses. To meet the challenge, salauno, in collaboration with Instituto Politécnico Nacional, one of the largest public universities in Mexico, developed the first one-year nursing program offering a specialization in ophthalmology.

In 2012, with funding from the Inter-American Development Bank and with technical assistance from Aravind as well as Duke University's Ophthalmology Department, salauno created an official accreditation program to certify ophthalmologists in cataract and refractive surgery and to give nurses specialization in eye care. These programs became an important part of salauno's vertical integration.

### Setting an Affordable Price Point

salauno conducted market research to determine a price point for basic cataract surgery that would be within reach of low-income patients who had to pay out-of-pocket. It settled on a fixed package price for this market segment of 6,500 pesos, approximately \$553 at the time. This figure, which was 50 percent below the market price, was possible because the company recovered its fixed costs through other service options and partnerships.

salauno also pioneered the use of small-incision cataract surgery in Mexico. This surgical method has outcomes comparable to other surgery options—success rates over 95 percent, recovery times of three to seven days, and restoration of vision immediately after recovery—yet it is 35 to 70 percent less expensive than techniques used in private hospitals.<sup>13</sup>

To further lower costs, salauno's affiliate labUno became the exclusive Mexican distributor of Aurolab lenses. These

high-quality lenses were manufactured by Aravind's pharma division and lowered the cost of surgery by 40 percent.

### Streamlining Operations

Another key to offering affordable treatment was driving down salauno's operational costs by optimizing staff responsibilities with task shifts. In other Mexican hospitals, doctors carry out almost all aspects of patient care, including basic eye exams, thus driving up costs. At salauno, optometrists and medical assistants take on basic medical tasks such as conducting refractive exams, and then decide if it is necessary for the patient to see an ophthalmologist, whose time is spent performing more comprehensive exams and surgeries. This structure reduces costs and results in a 5:1 ratio of optometrists and medical assistants to ophthalmologists.<sup>14</sup>

Efficiencies were even built into the very design of the operating room, where one surgeon rotates between two operating stations in the same room. As a surgeon performs surgery at one station, a nurse prepares the next patient at

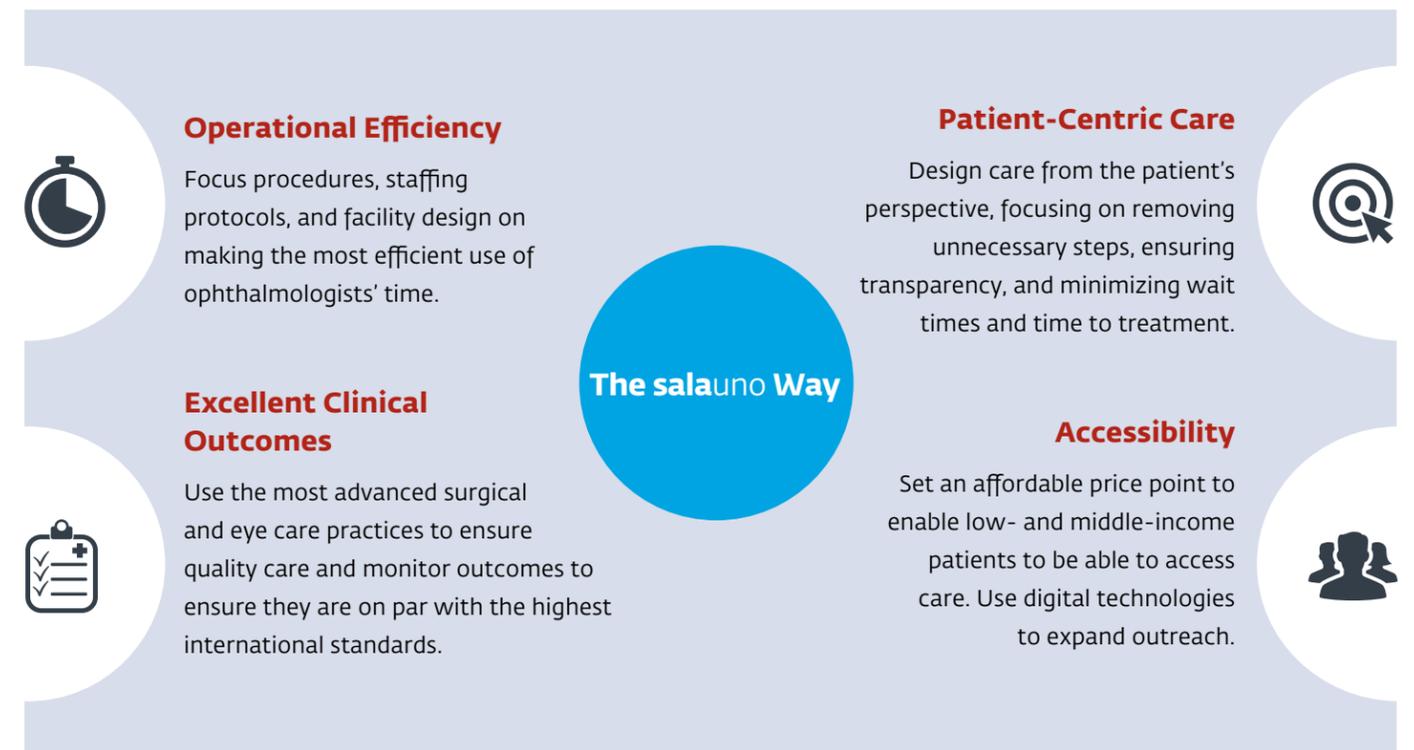
the other, minimizing time between surgeries and enabling doctors to perform more surgeries.

These efficiencies also enabled salauno to get patient wait times considerably lower than those of its competitors, vastly improving the patient experience. Patients can see a doctor within 60 minutes of arriving at a clinic, and if needed, they can have surgery within five days. By comparison, wait times to see a specialist at government hospitals could be up to six months, while surgery dates were booked 8 to 11 months in advance.<sup>15</sup>

In 2012, salauno had its business model reviewed by consultants from Aravind, who recommended that salauno streamline its processes even further to allow doctors to operate on patients the same day they arrived and reduce patient wait times even further.

### Welcoming the First Patients

To help generate the initial flow of patients, Orellana and Okhuysen developed a partnership with Fundación Cinépolis,



which sponsored cataract surgeries for people with low incomes. The foundation agreed to give reimbursements that allowed **salauno** to provide 100 surgeries a month at no cost to patients. **salauno** quickly gained attention for delivering excellent clinical outcomes and a streamlined patient experience while maintaining accessibility to patients of all income levels.

## EARLY GROWTH

### Partnering with the Government

Just nine months after opening, **salauno** became a certified provider for Mexico's nationwide Seguro Popular public insurance program. The program had a huge impact on **salauno's** patient flow, giving **salauno** a major expansion opportunity and enabling the company to reach very low-income, unemployed, and self-employed individuals.

**salauno** was reimbursed a fixed fee of 9,000 pesos, approximately \$698 at the time, for each patient.<sup>16</sup> Unlike out-of-pocket patients, patients receiving surgery free of charge could not receive additional amenities, such as more exclusive waiting rooms, shorter wait times for surgery, or certain premium surgery techniques and lens types.

### Expanding through Vision Centers

Later that year, **salauno** was awarded grants by the Inter-American Development Bank and the Instituto Nacional del Emprendedor (INADEM), an entity funded by the Mexican government, which enabled the company to accelerate its expansion. Rather than open a new surgical facility with expensive equipment, **salauno** opted to open small "Vision Centers," each with one or two optometrists. The Centers, just 10 square meters in size, could conduct up to 600 basic screenings per month and refer patients to the existing surgical center for treatment that would likely be subsidized by Seguro Popular.

By December 2012, **salauno** had opened 12 Vision Centers. Even with surgeries being subsidized, only 30 percent of patients referred to the surgical center underwent treatment. To increase patient follow-up, the company

## KEY PERFORMANCE INDICATORS

Tracking performance is critical to ensuring a positive patient experience and a high level of efficiency. The company works with Design Thinking, Lean, and Six Sigma tools to continually improve. Key indicators are:

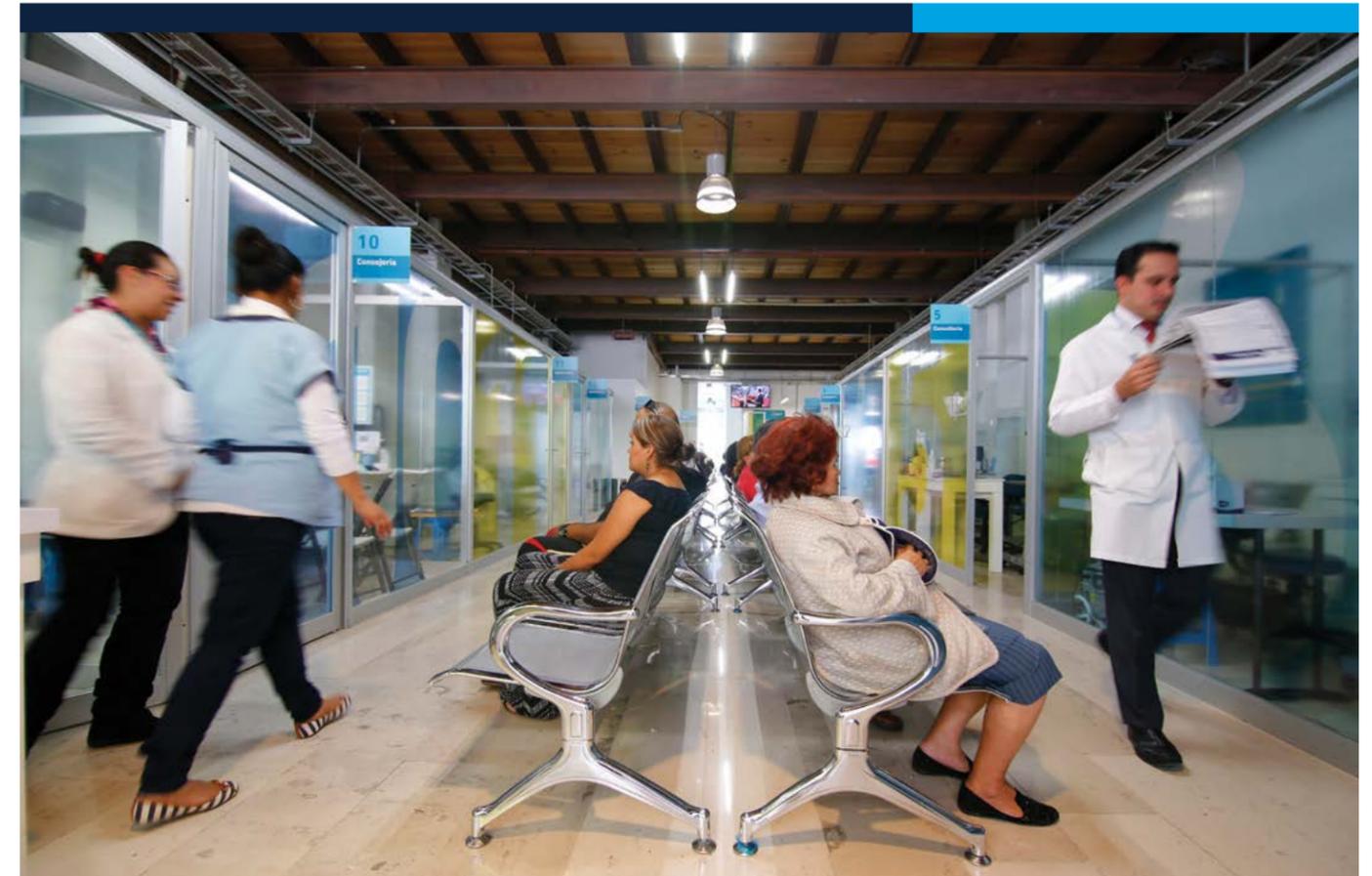
- Patient wait time
- Number of patients screened per day
- Screening process errors
- Number of surgeries per day
- Cost per surgery
- Net Promoter Score
- Conversion rate to treatment
- Operating room process errors

systemized its approach to counseling and increased its conversion rate from diagnosis to treatment to 65 percent.<sup>17</sup>

In addition to accelerating expansion, the two grants helped the company build its governance, accounting, and results measurement practices. It implemented NetSuite, a cloud-based system, to track key financial and operational data, and Salesforce, a customer relationship management tool, to electronically manage opportunities and patient health records.

## CHALLENGES AND A SHIFT IN STRATEGY

By 2013, **salauno** was performing more cataract surgeries than any other private hospital in Mexico.<sup>18</sup> It had expanded its original surgical center by adding a "Plus" facility across the street to accommodate patients who paid for more expensive care packages.



The company relied heavily on its partnerships and subsidies for patient volume. So, when the election of a new political party at the end of 2012 made the future of the Seguro Popular program uncertain, **salauno** faced financial difficulties. The program stopped reimbursing for cataract surgeries, and unpaid amounts quickly reached a level equal to three months of sales. The company had to stop performing surgeries for patients covered by the program.

The Seguro Popular partnership had pushed **salauno** to grow faster than expected, and with a large portion of its patient demand suddenly withdrawn, **salauno** was left with excess capacity. At the end of 2013, the company had to lay off 12 percent of its staff and shut down its Vision Centers.

### Targeting a New Patient Profile

**salauno** needed to rapidly expand beyond Seguro Popular-covered patients. The company wanted to reach those with slightly higher incomes of up to \$2,300 per month who could pay out-of-pocket. It also started targeting Mexico's small percentage of privately insured patients.<sup>19</sup>

Reaching this new patient segment would require a new promotional strategy, and so, with the assistance of a second INADEM grant, **salauno** underwent a complete brand makeover. It analyzed the entire patient experience from diagnosis to treatment and launched radio, print, and online advertising.

Since patients who visited primary care physicians were more likely to be able to pay out-of-pocket, **salauno** developed physician partnerships. To facilitate referrals, the company created online training videos for physicians, and to encourage patients, it made the first consultation free. They also performed outreach at primary care clinics to create awareness among primary care providers and establish brand presence.

### Maintaining its Low-Income Patient Base

While it sought to expand its base of middle-income patients, **salauno** continued to reach out to those in lower income brackets, sometimes by collaborating with local government or non-governmental organizations on a

## FINANCING EXPANSION

Until 2013, almost half of the company's financing had come through grants. But to finance the physical expansion of its network, **salauno** initiated its first round of financing. In April 2014, the company brought on two investors: International Finance Corporation (a member of the World Bank Group) and Adobe Capital (a Mexico-based impact investing fund).

The International Finance Corporation (IFC) understood the large unmet need for eye care in Mexico and was impressed with the founders' clear understanding of the market, their strategy to grow the business, and their ability to leverage knowledge from Aravind.

IFC saw Orellana and Okhuysen as part of a growing trend of young entrepreneurs entering the health sector and approaching care from a process perspective. From the patient experience to operational organization and oversight, even to financial management—every component was designed with an eye towards quality and efficient care.

For IFC, **salauno** was a relatively early-stage investment. IFC felt that the company's "hub-and-spoke" model would allow for modular growth and enable the company to adjust as needed.

From **salauno**'s perspective, IFC brought great experience investing in the global health sector and a wide network of clients that **salauno** could learn from. Being a member of the World Bank Group, IFC would also be able to help **salauno** deal with government entities in the future.

In 2016, the company added LCA Capital to its investor base and received the second tranche of the original IFC and Adobe investments. LCA, a Mexico-based family office and private investment platform, added a good local network in Mexico City and expertise in retail and real estate, both of which **salauno** valued as it looked to expand.

cross subsidy model. A dedicated **salauno** outreach team provided free screenings and raised awareness, while local partners covered marketing and transportation costs and provided guidance and support. Such partnerships helped **salauno** earn credibility and trust in its community. Approximately 70 percent of patients treated through the community outreach programs had never before seen an ophthalmologist.<sup>20</sup> To expand access further, **salauno** got help from the World Diabetes Foundation (WDF) to strengthen its mobile-based diagnostic capabilities for diabetic retinopathy, glaucoma, and cataracts.

**salauno** maintained its existing partnership with Fundación Cinopolis, but started shifting patients to specific days and times to avoid mixing paying and non-paying patients. It also began to work with non-bank financial institutions like KIWI and ALIVIO Capital to facilitate saving plans and loans that would cover the cost of treatment.

**salauno** found that approximately 60 percent of its new patients were referrals from previous patients.<sup>21</sup> To encourage such referrals, **salauno** developed a "Net Promoter Score" system that identified the likelihood that the patient would recommend **salauno** to others and an Ambassador Program for patients with high scores.

**FIGURE 2: The salauno Network**

### Diagnostic Centers



**Size:** 200-350 m<sup>2</sup>  
**Capacity:** 24,000 consultations per year  
**Footprint:** 10 locations in areas with high foot traffic

- Services:**
- Non-surgical treatment for conditions including glaucoma, strabismus, myopia, and astigmatism
  - Lasik
  - Comprehensive eye exams and imaging tests
  - Patient referrals

### Surgical Center



**Size:** 1,000 m<sup>2</sup>  
**Capacity:** 13,000 surgeries per year  
**Footprint:** 1  
*(5 additional planned for 2018)*

- Services:**
- Surgical and non-surgical treatment for conditions including cataracts, retinal diseases, and glaucoma
  - Lasik
  - Comprehensive eye exams and imaging tests
  - Patient counselling

### Surgical Hub



*(Under Construction as of 2017)*

**Size:** 3,500 m<sup>2</sup>  
**Capacity:** 35,000 surgeries per year  
**Footprint:** 1

- Services:**
- Surgical and non-surgical treatment for conditions including cataracts, retinal diseases, glaucoma, oculoplastic disorders, and strabismus
  - Lasik
  - Comprehensive eye exams and imaging tests
  - Patient counselling
  - Pediatric specialization

## Expanding the Physical Network

To attract and serve new patients, **salauno** needed to increase its physical presence. Building another full-service surgical center, at the cost of \$1 million, was not an option, as the existing center was operating at only 35 percent capacity.<sup>22</sup> **salauno** focused instead on extending its network through mid-sized locations called Diagnostic Centers. These would increase **salauno**'s presence in Mexico City, generate additional surgical referrals, and hopefully lead to increased utilization of the existing surgical center.

Despite the challenges of finding reasonably priced real estate in Mexico City, **salauno** opened three Diagnostic Centers in 2015. They were smaller than the surgical center

but much more robust than the previous Vision Centers. With one or two ophthalmologists and up to 10 support staff, the Diagnostic Centers could provide up to 2,000 screenings per month, pre- and post-operative care for patients receiving treatment at the main surgical center, perform diagnostic studies, and provide non-surgical and laser treatment.

To increase and diversify revenue, **salauno** expanded beyond cataract surgery into additional sub-specialties. It also added **salauno**-run ophthalmic pharmacies and optical shops to its facilities, which also streamlined the patient experience and increased foot traffic.

It started a new line of service called “Intelligent Surgery.” Doctors with private practices could rent surgery rooms, consumables, and staff at low cost during times of low use. This service improved the center’s utilization and introduced **salauno** to a new base of ophthalmologists, some of whom would later work for the company.

By 2015, **salauno** was operating five business lines which together treated 85 percent of the different types of visual impairments in Mexico. The main surgical center had also added new surgery rooms, expanded the services it offered, and functioned at 65 percent of capacity.

The Seguro Popular program was also reinstated in 2015, though at a much smaller scale. **salauno** won contracts for Mexico City, Hidalgo State, and the State of Mexico. However, patients had to be referred from government clinics, where wait times could be long, processes more complicated, and public sector doctors less comfortable with referring patients to **salauno**. As a result, the program had a much less significant impact on **salauno**’s patient flow than it did in 2012.



## MANAGING A GROWING COMPANY

Early on, the founders had decided to allocate responsibilities according to their respective strengths. Orellana focused on day-to-day operations, including human resources, and Okhuysen on long-term strategic growth, building partnerships, and raising capital.

Management tasks were divided along similar lines between two teams. The Short Cycle team focused on operations, quality, and service, while the Long Cycle team focused on expansion, relationships with payers, volume generation, fundraising, digitalization, and efficient capital expenditure. Management tools like balanced scorecard, business reviews, and analytics ensured that both sides of the company were communicating and working with a unified vision.

Orellana and Okhuysen formed an Advisory Council to provide the young company with mentorship and help in making big decisions, approving budgets, and setting company goals. But following **salauno**’s first round of investment, they dissolved the Advisory Council and set up an official Board of Directors, taking an important step toward stronger corporate governance and future investment.

### Going Digital

Through their affiliation with the Schwab Foundation for Social Entrepreneurship and World Economic Forum, Okhuysen and Orellana began to see technology as a key to expanding the company’s role in making health care accessible and affordable to everyone.

With estimates that 80 percent of people with lower incomes in Mexico have a smartphone, in 2016 **salauno** began a large-scale effort to integrate digital and mobile solutions and pursue an omni-channel strategy. **salauno** can now communicate with patients and schedule appointments using the WhatsApp platform, two-way SMS text messaging, and artificial intelligence-powered chatBOT on its website and Facebook.

This type of cross-channel approach is helping the company add to and improve the patient experience. Other efforts—many supported by the Pfizer and LINKED foundations—include:

**NEW PATIENT OUTREACH:** Social media has proven to be a highly effective mechanism for reaching new patients at all income levels. In many cases, younger family members come across **salauno** online and bring their elderly relatives to the clinic. **salauno** uses online marketing to reduce break-even and payback time for new clinics.

**THE PATIENT JOURNEY:** **salauno** believes that digital technologies can help patients better manage the experience from diagnosis to treatment. The company is developing a mobile application for its patients and their families that will help them navigate the process, get their questions answered, and understand their diagnoses so that they can make informed decisions in a timely fashion.

**CUSTOMER INSIGHTS:** With the support of Microsoft, **salauno** is experimenting with big data analytics to deepen their understanding of their patients. This will enable them to implement a more targeted marketing approach by monitoring their geographic service penetration, epidemiology, and conversion rates at every patient decision point, including the decision to get lab work done or schedule a surgery.

**SERVICE DELIVERY:** **salauno** uses machine-learning and tele-diagnostics to increase efficiency and accessibility to patients who do not live near a facility. One new diagnostic method, for example, uses algorithms powered by Salesforce’s artificial intelligence to suggest possible treatment. Prior to their appointment, patients provide basic information via the mobile-based application. **salauno** optometrists add in test results so that by the time a patient sees the ophthalmologist, the program has already cross-referenced the patient’s information with clinical guidelines

## MAINTAINING THE ENTREPRENEURIAL SPIRIT

One lesson Orellana and Okhuysen had taken from Aravind was that staff must feel invested in the company’s mission. In 2012, the founders had worked with graduate students from the University of California, Berkeley’s Haas School of Business to create a strategy that would keep the entrepreneurial spirit alive as the company grew. The strategy emphasized four principles:

1. Do well by doing good
2. Continuous evolution
3. Service delivered with quality and effort
4. Team work based on discipline and trust

and suggested possible courses of action. Ophthalmologists can choose to follow or over-ride the suggested treatment, and their decision feeds back into the algorithm.

### Deepening Partner Engagement

**salauno** continues to test new types of partnerships with a variety of foundations and government offices. Many of these partnerships are starting to gain traction and have significantly increased output for both parties. For example, government facilities may now send patients to **salauno** for treatment, leading to government savings of at least 50 percent.<sup>23</sup> In other cases, **salauno** provides staff trained in the company’s efficient procedures for government facilities, leading to three- and fourfold increases in productivity.

**salauno** is also enhancing its existing partnerships. As of 2017, referring physicians and optometrists are now connected via a mobile application and gaming system where they can accumulate points for referrals and exchange them for educational opportunities.

## LOOKING AHEAD

salauno is well on its way towards its goal of becoming Mexico's leading surgical eye care provider, one which would treat 500,000 patients and perform 25,000 surgeries each year. Currently, the company sees 7,000 patients each month and has plans to open surgical hubs in five more cities in Mexico and increase its staff to 600.<sup>24</sup>

Out-of-pocket payments represent 49 percent of all health care expenditure in Mexico and remains a growth area for salauno. But it plans to maintain a parallel focus on low-income patients—a hallmark of salauno since it first opened. As of 2015, more than 30 percent of its patients were from households earning less than \$899 per year.<sup>25</sup> Because credit is expensive in Mexico, the company sees patient financing as a growth area that it has not yet been able to fully develop.

salauno also sees the potential to replicate its business model and thus expand its impact across borders. salauno's growth demonstrates the power of cross-

border knowledge sharing and of being able to pivot at critical moments when trying to develop a scalable inclusive business model. The company continues to tap into partners that can help it to innovate, adapt new technologies, and pursue its objective of ending needless blindness in Mexico.

**For more information on  
inclusive business at IFC, visit**  
[www.ifc.org/inclusivebusiness](http://www.ifc.org/inclusivebusiness)



## ENDNOTES

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