

Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries

Case Study: Lumni, Colombia

Fundación Ecología y Desarrollo

Office of the Multilateral Investment Fund

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## Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries

## CASE STUDY LUMNI, COLOMBIA



## Multilateral Investment Fund (IADB) · Fundación Ecología y Desarrollo

**July 2016** 



### Contents

| 1. | Introduction                                 | 2  |
|----|--|----|
| 2. | Local Social Issue and the Challenge         | 4  |
| 3. | The solution and social impact               | 5  |
| 4. | The Social Entrepreneur                      | 6  |
| 5. | Business Model                               | 7  |
| 6. | Social and Financial Performance             | 13 |
| 7. | Business Development and Ecosystem Evolution | 15 |
| 8. | Scalability and Replicability                | 19 |
| 9. | Final Reflections                            | 20 |

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Felipe Vergara, Founder Lumni Natalia Toledo, Lumni Inc. Daniel Rojas, Lumni Chile Sylvia Ortiz, Director Lumni Colombia

## 1. Introduction

| Name: LUMNI                           |  |  |  |  |  |
|---------------------------------------|--|--|--|--|--|
| Description                           | Lumni manages investment funds that finance higher education through sponsorship contracts, with students paying back the investment as a percentage of their salaries after graduation. |  |  |  |  |
| Founded                               | 2002 in Colombia and Chile, 2008 in Mexico and the US, 2013 in Peru.   |  |  |  |  |
| Legal format                          | Private limited company in each country.   |  |  |  |  |
| Num. employees                        | 37 in Colombia, 4 in Chile, 8 in Mexico, 6 in Peru and 1 in USA (total 56).  |  |  |  |  |
| Geographical reach                    | Colombia, Chile, Mexico, USA and Peru.   |  |  |  |  |
| Certifications/ awards                | Ashoka Fellow (2006), World Economic Forum (2011), Impact<br>Assets (2011), Clinton Global Initiative (2010), Endeavor<br>Global (2009), Poder Business Awards (2010).                   |  |  |  |  |
| Social innovation variables           |  |  |  |  |  |
| 1. Innovation type                    | Unique investment model for those who would not otherwise has access to finance for their education, while providing a financi return for investors.                                     |  |  |  |  |
| 2.Social impact                       | 8,000 students from low-income families have had access to higher education for the first time in their families. (in Chile, Mexico Colombia, United States and Peru).                   |  |  |  |  |
| 3.Financial sustainability            | Across the portfolio in all five countries investors are receiving an average return of 9.1% and the average rate of students defaulting on repayments is 2%.                            |  |  |  |  |
| 4. Key Partners and ecosystem players | Private investors (individual family offices and private investment funds) and private businesses in all four countries.   |  |  |  |  |
| 5. Scalability and Replicability      | Growing exponentially and has already been replicated in 4 countries with offices in Colombia, Chile, Mexico, Peru and the US.   |  |  |  |  |
| References                            | www.lumni.net  |  |  |  |  |

#### 2. Local Social Issue and the Challenge

The key challenge that Lumni addresses is the lack of access to higher education for young people from low-income backgrounds (temporarily or permanently) in Latin America. According to ECLAC estimates based on household surveys, higher education enrolment in 2010 was around one third of the 18-24 year old cohort. Countries with greater education spending as a percentage of GDP and as a percentage of government expenditure tend to have more students in higher education.<sup>1</sup>

The high costs of public education combined with deterioration in quality are two consequences of the privatization reforms being introduced in higher education across Latin America. These reforms incited opposition in various countries during 2011, particularly in Chile and Colombia.

As the global economy has become more knowledge-based, the importance of a university education has risen dramatically. In the case of Latin America, 0.7% of 25-29 year olds in the lowest income quintile completed higher education; the figure was 18% among those from the richest quintile. There are many reasons why people fail to reach college, including, of course, the lack of access to quality primary and secondary schooling. However, for millions of students who could succeed in college, the main limiting factor is access to finance.

Education can be a great investment, but it carries risks as many students fail to graduate. The dropout rate for university students in Colombia is over 50% and in the US, a third of college students fail to compete their degrees within six years, because of financial difficulties.<sup>2</sup> Today many young people default on their student loans, which can threaten their future job and credit prospects. Many graduates also struggle to find work after their studies and others find that the salaries are lower than anticipated. Because of these risks, many students, especially from low-income families, are wary about taking on considerable debt for their going to university. As a consequence many underfinance their education. This means that students live at home, go without meal plans, try to get by without purchasing text books, or work long hours; all of which make it less likely that they will complete their degrees.

<sup>&</sup>lt;sup>1</sup> Regional report of Education for All, Latin America and Caribbean. 2004, UNESCO

<sup>&</sup>lt;sup>2</sup> <a href="http://www.nytimes.com/2011/05/19/business/economy">http://www.nytimes.com/2011/05/19/business/economy</a> "Many With New College Degree Find the Job Market Humbling"

#### 3. The solution and social impact

Lumni offers an innovative way of providing financial support to students. Key to the model is that it is not a loan to be paid back with interest, but rather it is an investment and is paid back as a percentage of the alumni's salary. If they do not end up earning much money, the payment is low, and if do, they can afford to pay more. Lumni evaluates students based on their academic potential, rather than on their parent's financial history.

Lumni's mission is to help students succeed both in college and in their career. To achieve this, Lumni helps them pay for college in a manageable way and provides mentoring assistance during their studies, with ongoing career support once they graduate. Below are some of the other unique features to Lumni's model:<sup>3</sup>

- Funding education is just the beginning. Lumni helps students achieve their college and career goals by offering a host of additional support services.
- Students don't pay back the investment until they graduate, although from the first month they pay a symbolic amount (8 15 USD) to adopt a culture of repayment.
- Lumni finances students based on their integrity and potential and not on their gender, age, racial or ethnic background, sexual orientation, or financial background.
- Lumni works only with investors and partners who share their principles and values.
- Lumni selects the most exceptional students to ensure the ongoing success of the model.
- Lumni's investors are an essential part of the network and are valued for their expertise and role in the sustainability of the system.

Lumni offers "Income Share Agreements" to good students from families with financial difficulties, which are struggling to pay for college. For example, for a normal engineering student in Colombia, in exchange for 8,500 USD investments, he/she agrees to repay 14% of his salary for an agreed period after he/she has graduated. This period is usually around 2 to 2.5 times the length of study financed and the percentage of salary paid back is a discretionary sum calculated on the basis on Lumni's experience, taking into consideration the different levels of salary of the alumni, market interest rates and the desired return on the fund. An "income contingent" repayment plan like this is far less risky<sup>4</sup> for a low-income student because if finally he/she has trouble finding a job or switches careers and earns a lower salary than expected, payments will drop automatically.

#### **Social impact**

So far Lumni has helped finance 8,000 students aged between 18 and 22 in Colombia, Chile, Mexico, Peru and the US and has pioneered a new financing model for higher education in the region.

<sup>&</sup>lt;sup>3</sup> Source: Lumni Report 2015

<sup>&</sup>lt;sup>4</sup> Source: Lumni Report 2015

#### 4. The Social Entrepreneur



**Felipe Vergara** is the President, co-founder and CEO of Lumni.

Growing up in Bogotá, Felipe attended a subsidized private school, which accepted students from a variety of backgrounds. He graduated as an industrial engineer from the Andes University in Colombia, then completed an MBA at the Wharton School of Business and worked as a consultant in McKinsey & Company in New York and Paris. Felipe was elected Ashoka Fellow in July 2006. In 2009 he was chosen by the magazine Bloomberg Business Week as one of the 25 most promising social entrepreneurs in the US and in April 2011 he received the Award for Social Entrepreneurship in Latin America at the World Economic Forum (Schwab Foundation).

After graduating, Felipe was saddened to discover that some of his close friends could not afford college. Later, he met Miguel Palacios, who had done research in human capital investments. Together, they saw an opportunity to address a pervasive problem. "The idea was to provide capital not based on a family's financial situation," explained Felipe, "but based on a student's potential — and without requiring collateral or a co-signer."

Lumni was founded on the belief that there is a better way to help students pay for their education. In 2002, Felipe Vergara and Miguel Palacios partnered to launch Lumni Chile and began financing students using the company's innovative model.

#### Miguel Palacios | Co-Founder and Head of Lumni Research

Miguel is Assistant Professor of Finance at the Owen Graduate School of Management, Vanderbilt University. He received his PhD from the Haas School of Business at the University of California at Berkeley and was a Batten Fellow at the University of Virginia's Darden School of Business. Miguel has authored numerous works on the subject of financing human

capital including "Investing in Human Capital"<sup>5</sup> and has consulted for the World Bank on the topic. Together with Felipe he set up the first operations in Chile and continues to work for Lumni as part of Lumni Research.

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<sup>&</sup>lt;sup>5</sup> Cambridge University Press, 2004.

#### 5. Business Model

Since it was founded in 2002, Lumni expanded to Colombia and Mexico in 2008, in 2009 to the US and in 2012 to Peru. To date, Lumni has funded over 8,000 students across the Americas and is a leader in the field of innovative student financing. Lumni Inc. is a private limited company registered in 2002 in the United States and the organization has subsidiaries registered as a limited company in Peru, a non-profit organization in Colombia and a limited company in Mexico.

#### 5.1 Characteristics of the business model

The business model is based on the relationship between investors and students structured through a fund managed by Lumni. Investors make a capital investment to the fund, which facilitates payment of tuition financing and manages the selection, guidance and ongoing support services to students. Students pay a monthly repayment from the very beginning before their first job (between 8 and 15 USD dollars) to create a "repayment culture" for the future percentage of their salary they will have to reimburse. After graduating, the payback period is usually between 2 and 2.5 times the period of study financed, and the length of the payback period is calculated on an individual basis for each student. At the end of the funding period, the money is returned to investors. Lumni designs and manages the fund, and takes a small management fee to cover fixed costs. Investors receive periodic financial reports from Lumni.

Reporting

Selection,
Guidance and
Coaching

Selection,
Guidance and
Coaching

Support Services

Students

Fund

Capital Investment

Fund

Support Services

Fig.1 Lumni's business model

Source: Lumni Report 2015

#### **Investment Funds**

The investment funds are the core business of Lumni and they are present in every country. The investors are a mix of multiple institutions and high net worth individuals. The structure

of these funds is mainly pools of students who fit specific profiles defined by Lumni. Thanks to these Investment Funds it is possible to achieve competitive risk adjusted returns.

Currently there are 11 investment funds with an average annual return of 9.1%, with an average of 2% of students defaulting on repayments (however, this does vary between countries). Each fund normally has a duration of ten years and students can enter at any time. Their personalized contract and the percentage to pay back depends largely on how many years the investment fund has been running, and how long till its completion.

#### **Corporate Funds**

Most of the corporate funds are managed by Lumni Colombia and are funded by corporations, foundations or universities. Each fund has a separate account, whereby the client defines the parameters of the account and the profile of the students. For example, there are funds for young people from populations affected by the armed conflict; other funds are for children of employees of the businesses, who invest directly in the fund. The investment goal and return varies and depends on the client; sometimes it is purely philanthropic and other times competitive and risk-adjusted. Currently there are 22 corporate funds managed by Lumni, with a recovery rate of 88%.

#### Lumni Inc. vs. Lumni based in countries

Although Lumni is registered as a separate entity in each country, several key services are coordinated and shared across the countries. For example, Lumni Inc. (the US based holding company), central offices as well as Lumni Research are operated from the office in Bogotá (Colombia).<sup>6</sup> Felipe Vergara is based most of the time in Lima with Miguel Palacios in the US. Lumni's country offices also have their own specific operations and are in very different development stages as described below. Every country is responsible for selecting their students, leveraging funds and monitoring the student contracts.

Lumni Inc. is the main shareholder of Lumni in every country, but the percentage of ownership differs. In 2015, 56 professionals in total were working for Lumni across the countries mainly for operational tasks (37 people). This operational team is in charge of evaluating student's profiles, monitoring their performance, as well as reminding them of payments, agreeing mentoring sessions, etc. The remaining staff are in the Research and Risk Management Unit (4 people), the Fundraising department, the General Administration department (5 people), the Finance department (3 people) and the Technology department (3 people).

The increasing activity of Lumni's country offices is also reflected in the number of people working in each country: 37 in Colombia, 8 in Mexico, 6 in Peru, 4 in Chile and 3 in the USA.

<sup>&</sup>lt;sup>6</sup> Lumni Research that analyzes tendencies on the job and education market and gives inputs to Lumni's offices in the countries

#### Fee structure and pricing model

A key element of the business model of Lumni is to spread risk between students and investors, with the investors making more or less return depending on how well the students do and their salary levels. Lumni pools its investments into different funds to balance out the risks. Some students will run into difficulties, others will achieve an average salary, and some will do very well. Thus, through diversification, the funds overall achieve stable returns.<sup>7</sup>

What this means is that the students who have the biggest financial challenges benefit from Lumni the most, as those who end up becoming investment bankers end up subsidizing the ones who decide to become social workers. In addition there is a period of grace if the graduate student is unemployed.

Traditional student financing requires a fixed interest payment (usually between 10 and 15%) for a period that most often does not exceed six years, regardless of the student's income and with no period of grace if the student is unemployed. In the traditional framework, students do not receive mentoring from their financial support organizations and financing is based on student's economic situation, with a guarantor required.

#### A personal contract based on social contract

Each student has a personal contract with the fund that depends basically on how expensive the University is, number of years left to complete the fund and an expectancy of the kind of job the student will get. Lumni evaluates this expectancy taking into account different indicators, including expected earnings. If the student ends up earning the average salary Lumni expected, the graduate will end up paying an interest rate similar to the market rate; and in this case Lumni will share in their success. The students' obligation is complete at the end of the mutually agreed period regardless of the total sum they have paid.<sup>8</sup> There is no collateral, no co-signers, no interest payments, but rather a personalized business contract between Lumni and the student.

"Lumni's business model is based on a social contract because some students with poorly paid jobs after graduation end up paying back less money than they received, but most graduates end up paying more than was expected, because they get better jobs", comments Felipe Vergara.

#### A pricing model good for investors and students

Lumni offers attractive financing options compared to other financial alternatives for education, as Lumni funds generally offer lower interest rates and longer loan periods than most alternatives. For example, in the case of Colombia, Lumni has a maximum of a hundred months for the repayment, in comparison with less than forty months for Corpbanca, Banco

<sup>&</sup>lt;sup>7</sup> http://opinionator.blogs.nytimes.com/2011/05/30/instead-of-student-loans-investing-in-futures\_r=0

<sup>&</sup>lt;sup>8</sup> Read more here: http://www.miamiherald.com/news/local/news-columns-blogs/andres-oppenheimer/article20396361.html#storylink=cpy

<sup>&</sup>lt;sup>9</sup> Source: Lumni Research (2015), official bank websites.. Notes: Uses the Annual Percentage Rate (APR) for student loans. All rates and terms are subject to credit approval. In the case of Lumni there is no interest paid, only a % of future salary committed. As of March 31, 2015. © 2015 Lumni, Inc. All rights reserved.

de Bogotá, BBVA o Villas. The latter two also rise to a 25% annual percentage rate, in comparison with Lumni's 17% annual interest rate. Thus Lumni funds offer higher returns than traditional fixed income loans with similar volatility and offer slightly lower returns than equity, but with nearly half the volatility.  $^{10}$ 

From the investor's point of view, Lumni has an average return of 9.1%, more than the Colombia Treasury or the US 10 year Treasury, whose volatility is also higher than Lumni funds. Moreover, Lumni funds are on average 30 times more diversified than a typical equity market portfolio. The comparative diversification of the Lumni investment funds is larger than other portfolios, especially in Peru with an average of 1,200 contracts per fund, in comparison with an average of 9 stocks per portfolio for other traditional funds.<sup>11</sup>

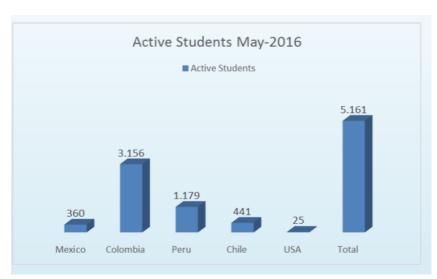


Figure 2. Lumni's active students - May 2016

#### **Target beneficiaries**

Lumni plans to reach a cumulative total of 30,000 students over the next five years. Lumni has financed 8,085 students since it began (1,267 new students in 2015 and 336 new students by May 2016) Figure 2 shows the number of active students in the different countries.

<sup>&</sup>lt;sup>10</sup> Source: 4 Bolsa de Valores de Colombia, Lumni. 1 Estimated annual volatilty and returns for 10yr period. 2 Colcap Equity Index. 3 Index constructed using Coltes 10-20yr 27 bonds. Lumni open funds in Peru, Mexico, Colombia and Chile. As of March 31, 2015. © 2015 Lumni, Inc. All rights reserved.

<sup>&</sup>lt;sup>11</sup> Source: Superintendecia Financiera de Colombia, Comisión Nacional Bancaria y de Valores (México), Superintendencia de Banca y Seguros (Perú), Superintendencia de Bancos e Instituciones Financieras (Chile), Lumni Inc. As of March 31, 2015. © 2015 Lumni, Inc. All rights reserved.

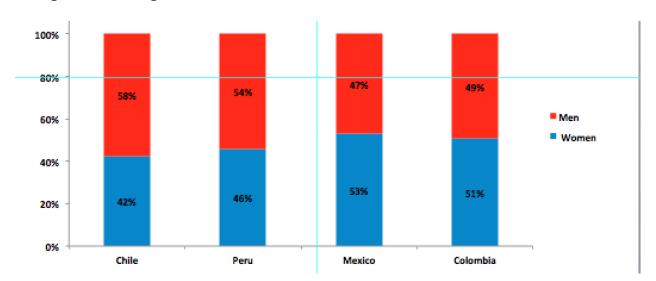


Figure 3. Percentage of women in Lumni's funds

As shown in figure 3, in 2015 48% of the total numbers of students who have participated in Lumni are women and 52% are men, with slight variations in each country. 58% of students are the first in their families to study in higher education.

#### Steps for becoming a Lumni beneficiary

The first step of participating in Lumni is the rigorous student **selection** process, to identify the highest potential students. The process of student selection is designed to mitigate the risk throughout each stage of the process and includes the following different phases:<sup>12</sup>

- Lumni promotes its program in top universities and students with alliances, publicity and events.
- The student applies online, ensuring robust student credit metrics: family structure, academic records, job history and financial records.
- The selection is made taking into account highest performers with aligned interests and competencies, a compatibility exam, academic competency, interests, personality, scoring and a final interview with Lumni staff.
- On selection, the student signs a legal document that clearly defines the terms of contract.

The selection for students for a corporate fund (which mainly operate in Colombia) is similar but the company investing in the fund will base selection on the particular characteristics of the fund as chosen. The company may want to invest in students from a specific region, or parents working in their companies, or students who have been displaced through conflict. In all cases Lumni is the responsible organization for the selection process, according to the company's criteria.

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<sup>&</sup>lt;sup>12</sup> Source: Lumni report 2015

A second step is the **financing of the education**. Mostly, funds are paid by Lumni directly to the university (tuition payment) and are released only if student has complied with the requirements stipulated in the contract with Lumni requirements.

Thirdly, the **repayment collection:** students make small monthly payment (from 8 USD to 15 USD, depending on whether an undergraduate or postgraduate student) throughout their studies. A close relationship is developed between the student and their manager at Lumni that facilitates a strong willingness to pay, as well as a robust legal backdrop for contact enforcement, which also motivates timely payback. In the case of the corporate funds, corporations usually accept a certain percentage of dropout because financed students from particularly vulnerable sectors have riskier conditions.

For all beneficiaries **student support** from Lumni is key to bolster earnings potential and minimize dropouts. Thanks to academic tracking, Lumni accompanies and monitors students throughout their studies, identifying areas of difficulty (academic and personal) and connects student to appropriate resources. Another important resource is *Lumni Academy*, which organizes mandatory workshops per-semester focused on key skills, as well as tutorials to strengthen areas of weakness.

#### 6. Social and Financial Performance

#### **6.1 Social Impact Performance**

#### 6.1.1 Social impact achieved

The number of students financed by Lumni has shown consistent growth in every country. By 2016, Lumni has benefited 8,000 students and their families; 60% of them in Colombia, 14% in Peru, 12% in Chile, 9% in Mexico and 5% in the US.

In the case of the corporate funds, Lumni has an additional impact because students from vulnerable communities without any other possibility of being financed have access to university. An example is the "*Ilumina*" fund in Chile financed by the Social Investment Fund (acronym in Spanish, FIS), which seeks to fund 200 students from the base of the pyramid, exclusively for technical training.

#### 6.1.2 Social impact measurement

The impact measurement systems are currently being developed by the Lumni Research department, based in Colombia. Lumni Research not only studies trends for analyzing the risk of investing in certain degrees, universities, etc., but also analyzes how the fund makes a positive impact on Lumni's students in order to convince investors and corporations to contribute to the fund.

Lumni uses the following indicators to measure its social impact: 1) number of alumni 2) income of former Lumni's students. In addition, the default on payments is measured, and this is an average of 2% across all countries. However, this is slightly higher in some countries, as in the case of Chile. The Lumni team suspect that this is because the earliest funds in Chile did not begin with the monthly repayments from the start, however in the other countries students were obliged to start paying a symbolic sum from the beginning.

#### **6.2 Financial Performance**

Lumni has over 12 years of experience in Income Share Agreements (ISAs) both managing investment funds and corporate funds. This kind of agreement allows investors to obtain risk-adjusted financial returns while making a social impact. Lumni is one of the largest ISA companies for education in the world and the investors include institutions, family offices, foundations and corporations from Latin America, North America, Europe and Asia.

Two funds have already closed in Chile, with a period of 10 years each. The first began in 2002, and has paid an 11.2% return to investors and the second a 15.3% return (before taxes). However, across all countries the average return is currently estimated at 9.1%.

#### 6.2.1 Revenue and Expenses

The biggest difficulties for Lumni have been getting over regulatory hurdles and raising investment capital. Even though Lumni's early funds performed well, investors remain tentative. However, one set of investors (impact investors who like to achieve a balance of profitability and "social return") embraced the Lumni's idea.

About 70% of Lumni's investments have gone into corporate funds (mostly in Colombia, as showed in the table below). These are targeted to achieve social goals like financing the education of students who come from indigenous communities, are disabled, or want to work as teachers in rural areas. These funds can finance more students than scholarships or grant programs which have tended to be developed for this target, because the money is replenished.<sup>13</sup>

Lumni has a total of 22 million USD in investment funds and 18 million USD in corporate funds (with 11 corporate funds in Colombia) and a total of over 100 investors across all countries.

Table 1. Summary of Lumni's financial resources from 2002 to 2015

|                     | Colombia  | Peru       | Mexico   | Chile    |
|---------------------|-----------|------------|----------|----------|
| Investment<br>Funds | 1.57M USD | 10.7 M USD | 7.7M USD | 2.8M USD |
| Corporate Funds     | 12.1M USD |            | 2.4M USD | 3.2M USD |

Source: Lumni Report 2015\* does not include US data.

#### **Lumni Investor profiles**

The profiles of private investors are mainly successful entrepreneurs who did not receive much help in their own beginnings as students or entrepreneurs. Their companies tend to deal with social issues to the production of specific products, commercial investments, frequently with international experience. The benefits for investors are financial and social. First, their financial risk is reduced by investing in funds that invest in a low risk portfolio of hundreds of students across different careers. Second the social benefits are guaranteed as Lumni targets students from low-income backgrounds.

#### 6.2.2 Income from Corporate and Investment Funds

In a typical Investment Fund, such as the "Talent Fund II" in Colombia which was launched in November 2015, there was a minimum investment of 160,000 USD per investor, with a target fund size of 6.7 million USD. The maturity of the fund is 10 years and in the case of this fund the expected return is 12.4%. The fees charged by Lumni are 1.5% of capital raised, 2% of capital committed or invested and 20% of the returns over and above 8%. The administrator of this fund is an external organization (FiduOccidente), in collaboration with the legal firm (Acebedo and Serna Lawyers).

A similar structure works for other countries such as the first "Talent Fund" launched in Peru. In 2013 its target size was 12 million USD. This fund has an expected duration of about 9 to 11 years, with an expected return of 8%. The target population of this fund is 1,250 Peruvian

<sup>13</sup> http://opinionator.blogs.nytimes.com/2011/05/30/instead-of-student-loans-investing-in-futures/?\_r=0

students in their last three years of bachelor and graduate degrees studying either in Peru or abroad. The management fees for Lumni are 2.5% of the total value of the fund, as well as 10 USD per month per student.

#### 7. Business Development and Ecosystem Evolution

The following section outlines the key milestones in Lumni's development since the initial concept was developed in 2002 to the present day. Lumni has had a very different development process in each country. While Lumni Colombia can be considered to be in a growth stage, Chile, Mexico and Peru are in an early stage, and Lumni US is a start-up. Helow we describe the three key phases the business has gone through in the different countries, seed stage and early stage, and the case of Colombia, growth stage.

Table 2. A summary of Lumni's business development milestones from 2002 to present

| Stage  | Country  | Year/ Description  |
|--|----------|--|
|  | Chile    | 2002 Lumni Chile was launched.   |
|  | Colombia | 2007 Lumni Colombia was launched. First corporate fund   |
| Start-up   | Mexico   | 2009 Lumni Mexico was launched.  |
| St   | US       | 2010 Lumni USA was launched; first Talent Fund.  |
|  | Colombia | 2010 Expansion of corporate funds; Bavaria Fund / 2009 studies carried for an investment fund in Colombia. |
|  | Chile    | 2011 Second Investment Fund. Public education reforms in Chile.  |
| Early  | Peru     | 2012 Lumni Peru was launched. 2013 Talent Fund I.  |
| Ea   | México   | 2013 Second Investment Fund.   |
|  | Peru     | 2016 More than 1,100 students financed. Talent II to be launched.  |
| Colombia 2013 First Investment Fund in Colombia (Talent Fund |          | 2013 First Investment Fund in Colombia (Talent Fund I).  |

<sup>&</sup>lt;sup>14</sup> **Start-up stage:** a preparation period for setting up a business or an enterprise. An entrepreneur's team develops a business idea and a business model. In some cases, they have product/service prototypes which are not fully developed or tested. **Early stage:** A period from business initiation until business scale-up. An entrepreneur's team may first deliver its products/ services in a test market to examine its business model. Also, the team may file patents or obtain licenses, if necessary. Once the business model is consolidated, it starts its business. However, the business remains quite small due to lack of capacity and resources. It may reach a breakeven point at the end of this period. **Growth stage:** A period after scaling up the business. The business exceeds the breakeven point and increases its sales, number of beneficiaries, the market share etc. The team revises the business model in order to sustain and/or expand the business, if necessary. In some cases, the team starts to investigate new products/services.

#### 7.1 Start-up Stage: (2002 - 2012)

#### 7.1.1 Milestones from Colombia to Peru

The first ten years for Lumni were critical because the national offices were launched. Lumni started operations in 2002 in Chile and became the first company to create a human capital fund in an emerging market.

The Inter American Development Bank (IDB) approved an 837,000 USD grant for Lumni in 2007 for strengthening soft skills in students, mainly leadership. Also in 2007, Lumni Colombia launched its first corporate fund. Shortly after in 2009, Lumni Mexico started to operate and Lumni USA launched its first fund in 2010. At the end of 2011, Lumni reached its first 1,000 students financed and this quantity was doubled only a year after.

The biggest success was the Colombia country office (launched in 2007 with exponential growth based on corporate funds with currently a total of 22 in Colombia). During this time Mexico and US were launched in 2009 and 2010 respectively. In 2012, Lumni Peru opened its office and first investment fund.

#### 7.1.2 Key supporters

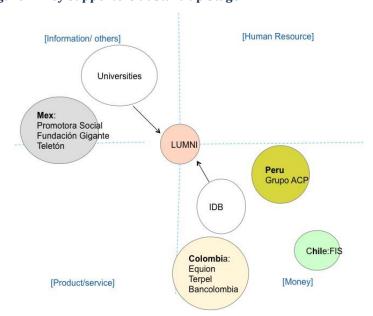


Figure 4. Key supporters at Start-up Stage

In this first stage, Lumni received important financial support from the IDB that benefited mainly the Colombia office but also Lumni Mexico and Chile. Universities gave plenty of information needed for the risk profiles (they receive money directly from Lumni to pay degrees although the contract is formalized with students).

Each country received different support from their national institutions. For example, in Colombia, corporations had an important role in this first stage due to the finance for

corporate funds. The Social Investment Fund (FIS) in Chile financed the first stage of Lumni with 1 million USD, which was especially important, as Chile was the first office. With the FIS investment, Lumni structured a new fund called "*Ilumina*."

During this stafe Mexico received information and publicity from different institutions, including *Promotora Social, Fundación Gigante and Teletón*. In the first two years of Lumni Peru, the ACP Group supported the organization with some finance and human resources.

#### 7.2 Early stage (2012-2016)

#### 7.2.2 Milestones

During this period Chile and Peru offices were in the early stage, and the US still in its start-up stage, and Colombia is already in its growth stage particularly through the growing number of corporate funds. In this sense, each country office has taken a different growth path. In Colombia the core business has been corporate funds while in Peru, Chile and Mexico the main business has been investment funds. Mexico and Chile had a steady increase during their early stage, starting corporate funds, worth 240,000 USD in Mexico and 320,000 USD in Chile.

The development of Lumni Peru has been tremendous, growing from 300 to more than 1,000 students in only three years, thanks to the learning process of Lumni in other countries as well as the significant financial support of several Peruvian institutions.

2013 was an important milestone for Lumni because Colombia launched its first investment fund (before its operations was based on corporate funds) and LGT VP invested 1.5 million USD in equity of Lumni Inc. In 2014, Lumni had more than 7,000 students financed since it began. In June 2016, Lumni started a new administrative system to more effectively access and manage all student and financial information across the country offices.

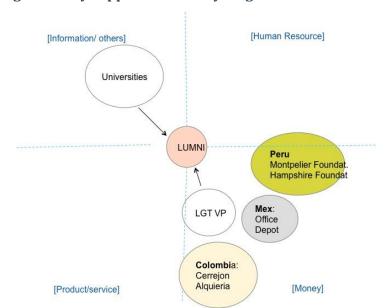


Figure 3. Key supporters at Early Stage

#### 7.2.2. Key supporters

In the early stage of Lumni, financial support was key at different levels. LGT VP Fund for the general Lumni Inc. as well as specific finance in the country offices. In Peru, Montpelier Foundation and Hampshire Foundation facilitated the expansion of the first investment fund. In Mexico, the Office Depot supported the organization and in Colombia new corporate funds were created. Universities continue to be a central actor in this stage for the information they give as well as the finance they receive from Lumni.

#### 8. Scalability and Replicability

Lumni's potential for scale is enormous given the size of the market, thus Lumni has a projected growth ranging from 20% to 30% by 2017. Some education experts see these payforward financial vehicles as a great solution for Latin America, in part because very few banks in the region provide affordable student loans. With proper regulation, Lumni-style companies could help millions to finish college across the Americas as higher education is a large and untapped market in Latin America.<sup>15</sup>

"In a region where fewer than 20% of students graduate from college, any innovation that expands the funding opportunities for disadvantaged youths is welcome," says Gabriel Sanchez Zinny, author of "Education 3.0: The struggle for talent in Latin America." <sup>16</sup>

Less than half of the official tertiary education aged population currently studies in Colombia, Peru and Mexico. There is a huge potential for growth, especially in Mexico. Government subsidies and financial aid are insufficient to address the demand for college financing and to serve the millions of low and moderate-income students, college financing has to be redesigned so it brings less risk and fear to private investors.

To date, about 3,000 of Lumni's students have graduated and about 1,200 have finalized their payment obligations. Some have become successful enough to become investors. "Our history is too short to say it can work on a massive scale," says Palacios. Nevertheless he and Vergara expect that Lumni's investment funds (which tend to have a higher return) will soon outpace its corporate funds as the organization continues to amass data about the reliability of the contracts and the students.

Lumni's scalability strategy is to continue to grow across Latin America and other similar models are now starting to appear such as FINAE (financial institution that provides educational loans to young people in Mexico), which has already benefitted 7,500 students.

<sup>&</sup>lt;sup>15</sup> Source: Lumni Research, based on UNESCO (2015). As of March 31, 2015 © 2015 Lumni, Inc. All rights reserved.

<sup>&</sup>lt;sup>16</sup> Read more here: http://www.miamiherald.com/news/local/news-columns-blogs/andres-oppenheimer/article20396361.html#storylink=cpy

#### 8. Final Reflections

Lumni has become in just a few years a successful higher education financing model in Latin America demonstrating a very high impact on young population that no organization had previously reached. However, the model is today no longer unique with similar examples in Mexico and other regions in the world. The consecutive expansion in different countries demonstrates the viability of Lumni's value proposition. The financial sustainability of its business model, as well as the successful completion of the first investment funds also shows potential for continued growth across the region.

#### **Key milestones**

Financial support from the IDB, as well as from LGT VP Fund, were key milestones in the start-up and early stages.

The launch of each country has also been a key moment in Lumni's development. Chile became the test bed for the other countries and every step taken became a lesson learnt for the other Lumni countries. Colombia's model was completely new due to its corporate funds and its huge impact in number of students. Mexico and the US advanced slowly but steadily. Peru has been the big surprise of the region, tripling the number of students and total investment in only three years.

#### **Challenges for growth**

Apart from the ongoing need to seek funding and new investors, the current major challenge for Lumni is to implement a successful strategy to widen the target audiences to first and second year students, as well as to finance "social degrees." Due to the higher ability for repayment, Lumni's investment has so far been concentrated on very technical university careers, such as engineering. These degrees usually have a high probability of employability and higher wages than other careers. Lumni has not yet financed students undertaking degrees in sociology, psychology or art.

Another challenge for a company like Lumni is access to reliable data at country level: recent graduates employability per career, entry-level salaries, salary growth, unemployment, etc. The better the data, the easier it is to demonstrate potential to future investors and therefore have capital to fund the more social degrees. In this sense, Lumni's investment funds do not yet have a low risk model to finance students in their first semester or students that want to study "less profitable" degrees. The organization is currently studying different possibilities for the future, such as combining corporate funds (higher risks) with the investment funds.

#### Contribution to social innovation and Lumni new administrative system

Lumni has a created a new investment model for widening access to higher education which has now been adopted by other organizations in the region. It was one of the first key players in the social investment landscape in Chile and one of the first in other countries, and contributes to the wider re-orientation of the investment sector where social and financial needs can be mutually reinforcing.