

# Strategic Plan for Genesi: Mexico

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## **Perspective View of the “Problem”**

Growing up as a Mexican student comes with a great deal of responsibility. Students represent the future potential of the entire country. Therefore, the education each pupil receives has a great impact on the overall development of this nation. In recent years, Mexico has fallen behind in regards to educating students with the most advanced materials and supplies available. Teachers in local schools have the passion and motivation to change lives, but they lack the resources to see this mission through. Across the country, classrooms have an average of thirty students who share three computers amongst each other. Research has proven that the integration of technology in classrooms enhances student experience, increases teacher effectiveness and reduces learning curves. If computers are supplemented with normal curriculum, the impact can be most beneficial to everyone involved. Schools that elect to leverage open-source netbooks can find a creative and cost-effective method to expand 1-to-1 computing, a system that provides every student with a computer. Most traditional netbooks offer low hardware prices that are attractive to schools, but may in fact lack “horsepower” capabilities. A company like Genesi can offer schools a comprehensive advantage with respect to limiting costs, but still producing powerful devices. Genesi hardware offers schools the opportunity to utilize open source, cloud-based systems and purchase cost-effective devices. Administration saves on licensing and hardware expenses, reducing strain on already limited technology budgets. Leveraging said technology platforms is a mechanism for administrators and teachers to enhance the student experience. Essentially, 1-to-1 computing allows for students to carry netbooks from class to class and combine technology in every aspect of their schooling. Students will be able to access online materials, utilize eLearning programs, write class blogs and communicate with peers, among others. School systems that utilize Linux-based netbooks programs purchase low-cost devices and continue to save money through the reduced need for IT support staff. This is because Linux is robust and requires much less maintenance in comparison to Mac or Windows operating systems. A key advantage that Genesi holds is the availability of cloud computing. Schools will offer learning software through an “Education City” online resource. Tom Klein, a pioneer in the paradigm of open-source netbooks in schools, has developed a package of education oriented applications for Ubuntu devices. Creating an Education City with a suite of learning software will alleviate many of the problems in Mexico’s school system. Some of the major issues are: improper teacher training, insufficient enrollment and low student achievements. The Federal Government of Mexico believes that integrating technology in classrooms can solve many of these problems. Interactive learning environments will compel students to participate more, which shall result in positive gains for personal achievements. Additionally, teachers who may lack effectiveness will be able to achieve just that by synergy of curriculum and software. Technology and 1-

to-1 computing is the solution to advancing Mexico's student experience. Genesi has a solution to change student lives and unlock potential for an emerging country.

## **Strategic Business Plan Team Members**

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## Table of Contents

<i>Perspective View of the “Problem”</i> .....	1
<i>Strategic Business Plan Team Members</i> .....	3
<i>Table of Contents</i> .....	4
<i>Executive Summary</i> .....	5
<i>Vision and Mission</i> .....	7
<i>External Analysis</i> .....	8
<i>Internal Analysis</i> .....	14
<i>Business-Level Strategy</i> .....	16
<i>Competitive Dynamics</i> .....	19
<i>Corporate Level Strategy</i> .....	21
<i>Wrap-Up</i> .....	22
<i>References</i> .....	26

## Executive Summary

Our plan for Genesi will include penetrating markets within Mexico in ways that not only align with the mission of computers for the masses, but also positively influence current relationships with valuable companies like TELMEX. We realize that certain steps are already underway with introducing the rebranded Genesi products into the Mexican market via TELMEX distribution. This is a valuable strategic move in order to establish a foothold in South America as well as establishing a reputation for fantastic low cost, open source, and durable products. Additionally, we feel that more can be done within Mexico while simultaneously progressing the project with TELMEX. Our strategic recommendation for Genesi is to procure funding from the national government of Mexico or similar educational organizations in order to donate specifically the SmartBook directly to schoolchildren across Mexico.

The status of the Mexican educational system suffers from common issues facing academic systems all across the world. Deep poverty in certain areas has decreased enrollment across the board. Whereas the few number of teachers who actually are available, often times have improper training. Nearly 93% of Mexico's budget for education goes towards teacher salaries, leaving little for advancement and progress for the system overall. There exists a high level of disorganization among schools leading to the lack of research and evaluation metrics for improving the current situation. Dropout rates have been reaching record levels; while the students who actually do finish, score significantly lower on academic achievements. Further, 85% of the university graduates remain unemployed or underemployed. Many sources indicated that the entire system is expensive, dysfunctional, and very corrupt.

These problems have not gone unnoticed by the Mexican Government and several programs over the years have been constructed in order to alleviate the stress. For example, Enciclomedia converted class curriculum into digital format, so that technology would be further introduced into the learning process. The program received \$1 Billion dollars and affects 22,000 fifth and sixth grade classrooms across the country. Additionally, Programa Escuelas de Calidad provided several \$10,000 grants to low performing schools for infrastructure improvement. This \$140 Million dollar initiative involved nearly 35,000 schools. The need for new technology is blatantly evident as the world evolves into a more digital environment. The cost of technology, however, has always been the enemy of its progress. Often times, pools of money are depleted before the quota for new computers and technology can be reached.

The core competencies of Genesi fit like a puzzle piece for a project such as this. The low cost hardware and virtually free software nearly eliminate the persistent issues of expensive technology. The long lasting and durable products exist as the ideal student tool for success while the open source world is continuously growing and evolving. New open source learning environments are becoming more mobile, virtual, and interactive than ever before. This will be a great opportunity to expand the uses of Aura since it is easy to maintain and scalable. Additionally, such a project is synergistic with previous TELMEX operations and ventures. Just in 2008, Carlos Slim and TELMEX donated

100,000 computers to more than 1,400 middle level public schools across the country. They seem understand the gravity of the need in Mexico and have been actively working towards incorporating new technologies into the daily lives of the students. It can be expected to have some cooperation from TELMEX in order to make this project a success. Further, introducing the product into the hands of children can only bolster its influence with parents and entire households.

We envision dealing with organizations of choice directly for funding and distribution of the SmartBooks whereas it can be reasonably expected that TELMEX will already be the internet service provider for the specific schools. These schools and their locations will be discussed and chosen by the better judgment of the distributing organization in order to ensure effectiveness. Our plan sells directly to the organization which distributes the SmartBooks to the schools. The schools will then place ownership of the SmartBook in the hands of the student in grade 5.

We believe that Genesi will be pleased with the success of such a project and withhold the immense satisfaction of distributing their products directly to the hands of children.

## Vision and Mission

### Vision Statement:

*To make the computer accessible to everyone, and drive a social paradigm that encourages the use and growth of cloud-based computing in Latin America.*

### Mission Statement:

*Our mission is to introduce computers and internet based applications to Latin America. We focus on open-source and open-community centered innovation that advances our knowledge and the customer experience.*

## External Analysis

### General:

#### *Demographic Information*

Mexico Total Population: 113,724,226 (July 2011 est.)

Major Cities – Population: Mexico City 19.319 million; Guadalajara 4.338 million; Monterrey 3.838 million; Puebla 2.278 million; Tijuana 1.629 million (2009)

Literacy Rate (*age 15 and over can read and write*): 93% (2009) World Bank 86.1% male: 86.9% female: 85.3% (2005 Census)

School life expectancy (primary to tertiary education): 14 years (2008)

#### *Grade Level Census: Grades 1-6*

Grade 1: 2,720,812 (2008) 2,655,139 (2007)

Grade 2: 2,602,148 (2008) 2,475,131 (2007)

Grade 3: 1,152,944 (2008) 1,160,045 (2007)

Grade 4: 2,363,385 (2008) 2,382,456 (2007)

Grade 5: 2,329,986 (2008) 2,385,534 (2007)

Grade 6: 2,281,402 (2008) 2,303,016 (2007)

\*Most recent data available, numbers published in 2010

#### *2008-2009 Educational System*

Total number of students enrolled in primary level schools: 14,808,000

Current Enrollment: 33,747,186

Men: 50.07% (16,898,722)

Women: 49.93% (16,848,464)

Basic Education: Includes the largest number of students with 25.6 million resulting to 76% of the entire education system. Within the basic education in Mexico there are 1.05 million teachers, which accounts for 66.1% of all teachers in the entire educational system. Primary Education consists of six grades with students ranging from ages 6-14. This part of the educational level is free for the students to attend. Specifically, there are 14.8 million students in primary education, which makes up 57.9% for basic education and 43.9% of the total education system. Primary education has the largest number of students and covers most of the population due to the range of ages (6-12) attending in the education system.

#### *Important Educational Enrollment and Achievement Metrics*

Absorption is referring to the percentage between new students entering and exiting the different educational levels. As you can see the completion of lower-secondary and upper-secondary education is rather high but the percentage quickly declines between the completion and entrance of upper secondary and tertiary.

Coverage is the percentage that represents the total enrollment of the typical age for the education level compared to the total population of that particular age range. This

percentage rate is similar to the dropout rate where the rate tends to decrease as the education level increases.

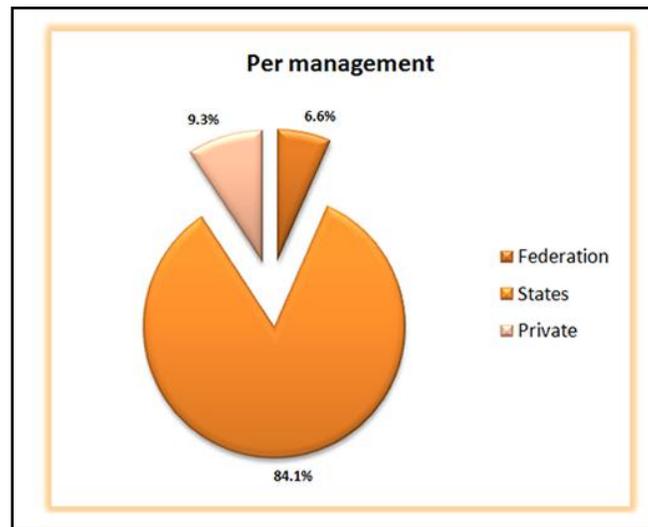
Terminal Efficiency represents the amount of students that finish their education on time. Terminal efficiency follows the same pattern as the coverage and dropout rates.

Academic Term 2008-2009				
	Primary	Lower Secondary	Upper Secondary	Tertiary
<b>Absorption</b>	---	95.3%	96.9%	79.3%
<b>Coverage</b>	97.0%	95.2%	62.3%	---
<b>Drop out</b>	1.1%	6.8%	15.7%	---
<b>Terminal efficiency</b>	93.8%	80.9%	60.1%	---

Mexico City has over 10,154 primary and secondary schools. Specifically related to technology, there are over 2,000 *Aulas Digitales* (digital classrooms) with broadband computers in public schools in Mexico City.

Pupil to Teacher Ratio: 28 to 1 (2008)

The number of students who attend public schools is 90.7%. The following graph provides the breakdown.



**Internet User Market:**

Internet Hosts: 12.854 million (2010)

Internet Users: 31.02 million (2009)

Average Monthly Broadband Subscription Fee: \$42 USD (2010)

### *Cultural Acceptance of Cloud Computing*

Frost & Sullivan published a report in December 2010 forecasting the greater acceptance of cloud computing in Latin America, and specifically Mexico. This method of computing is seen as a method to reduce operating cost. Various CIOs and CFOs involved in this study support this solution. Investments in cloud computing infrastructure have been steadily rising since 2009. Also, the Mexican government provides tax incentives for companies investing in IT infrastructure development.

### **Industry → Mexican Education System**

#### *Overall Student Experience:*

The school system in Mexico is relatively different in comparison with schools in the United States. Normal school calendars span from September to June, with students going to school Monday through Friday. Uniforms are required for elementary and secondary schools. There is not a municipal system in place for schools. Instead, there is a national governance of schools. The *Secretaría de Educación* (SEP) handles all decision making, leaving arbitrary power for local administrators individual state schools.

Classrooms lack availability of technology and resources. On average, there are only 3 computers for classrooms of 30 students. Technology is mainly only available in more developed cities. There is an exacerbating need for improvement in classrooms, as student scores and achievements are relatively low. Integration of computers in core curriculum has been tried in controlled settings, yielding highly effective results.

#### *Four Level Education System:*

- Preschool (K1–K3),
- Compulsory Basic Education (Grades 1–9)\*
- Upper Secondary Education (Grades 10–12)
- Higher Education

*\*Only compulsory basic education is officially funded by the government, other levels are elective and paid for out-of-pocket.*

#### *Key Facts:*

- Public Schools serve 87% of all students within Mexico
- Governance of school systems is officially decentralized across 32 states; however, this is mainly administrative. Actual decision making is centralized through the *Secretaría de Educación* (SEP)
- The SEP is involved with establishing curriculum, selecting textbooks, hiring and firing school personnel, and setting salary schedules
- National education spending amounts to 5.9% of GDP per capita (above the Organization for Economic Co-operation and Development average of 5.6%)

- Annual Education Spending reached \$28 Billion USD in 2005, 90% of budget going towards teacher salaries.
- Per student spending average of \$1,350 USD
- Current funding for schools is transferred from federal to state governments
- Primarily two organizations are involved in education policy: The Ministry of Education and the Teachers' Union (SNTE) - Sindicato Nacional de Trabajadores de la Educación
- Teachers and administrators have little to no autonomy, all decisions come from SEP

### *Key Issues Facing Education System*

- Student Level
  - Insufficient Enrollment
  - High dropout rates beyond primary level
  - Inadequate supply of upper secondary schools
  - Low student achievements
- Teacher Level
  - Improper teacher training
  - Lack of research and evaluation metrics for improvement measure

### *National Programs for Educational Improvement*

- *Enciclomedia* → Government funded program aimed at alleviating deficiencies in schooling system, i.e. low student achievements and improper teacher training. This program converts class curriculum into digital format so that students may learn interactively through the use of computers. \$1 Billion dollar program in which the government actually partners with Microsoft, in particular, its *Encarta* encyclopedia program. The program is already in place in more than 22,000 fifth and sixth grade classrooms around the country.
- *Programa Escuelas de Calidad* → Means “quality schools program,” a program that aims to improve low performing schools by using \$10,000 grants for infrastructure improvement, equipment, materials and administration. The program is a \$140 Million dollar initiative. Schools are required to formulate an improvement plan with the help of input from teachers. The extremely positive results from this initiative have made this a prize program for the SEP. Nearly 35,000 schools across the country are utilizing PEC grants.
- *Comision Nacional de Libros de Texto Gratuitos – CONALITEG* – Established in 1959, this national program was introduced by the SEP as an assurance method to provide elementary level students the “same” official information everyone else has access to. This is a free textbook program. However, curriculum and knowledge are standardized across the country. The intention of this program, as stated by Former President Adolfo Lopez Mateos, was to enable every school to help economically impoverished students have basic textbooks. A centralized theme in this organization is the concept that “a free textbook is a social right.”

- Current challenges for CONALITEG are to limit the considerable cost of revising and renewing information in its textbooks. There is an exacerbating need to elaborate digital versions of texts. Mexico cannot afford (economically AND socially) publishing obsolete information.

#### *Nationally Involved Companies and Organizations*

- International (Ford - \$1M per year), works with local groups
- National (TELMEX) funds only scholarships for higher education. Also, primary supplier of computers and internet access to students

#### **Telecom Industry in Mexico:**

- The future growth for the IT market in Mexico remains bright, with an expected compound annual growth rate (CAGR) of 4.5% through 2015.
- IT services segment will post the most robust growth with 10.2% CAGR through 2015.
  - telecommunications will represent the lion's share of the market, with 75% of total IT spending represented by this segment by 2015
- Manufacturing, communications, and banking and securities will be the top vertical industries in terms of demand for IT products and services in Mexico.
- Enterprises in Mexico, compared with other countries in Latin America, show a greater degree of openness toward IT services and outsourcing, especially in traditional areas. While leveraging cloud computing is on the radar of most enterprises, cost reductions tend to dominate the reasons for opting for an alternative delivery model of IT.
- Technology providers must bid for infrastructure projects that were canceled or postponed during the recession, as they are being reactivated, supported by tax incentives and government policies that promote modernization.
- In 2011, focus on technology opportunities in government, manufacturing and financial services companies, as the numerous structural reforms will allow for greater investments in new technologies and alternative delivery models, such as cloud computing and outsourcing in these sectors.
- Cloud computing is slowly maturing in Mexico, technology providers should assist customers now, especially midsize companies, in educating them about the benefits and pitfalls of moving their computing needs to the cloud.
- Forecasted 2011 IT spending in Mexico is \$72.4 billion, expected to increase to 7.6% of total real GDP by 2015.
- Focus of Mexican government on modernization of telecommunications, energy and utilities (among other categories)
  - Austerity Decree 2007 → Shifted government focus towards purchasing IT services rather than IT hardware and software. ([LINK](#) to 2007 article explaining government initiative)
  - Data Protection Law of 2010 → driver for document and content management (related to cloud computing)
  - Pension and Fiscal reforms of Mexican government in 2007, have created opportunity for IT companies to sell products and services

- Mexico's government is pushing to establish its country as a principal destination for manufacturing of IT products, but keeping a particular emphasis on building market for the outsourcing of key IT functions for companies located in the United States.
- ProSoft → government is attracting IT companies by providing incentives, such as cash subsidies of up to 50% of the total investment and tax credits of up to 30% for R&D spending.
- ProMexico → provides tax incentives and the promotion of the export business for IT companies. Benefits of companies participating in ProMéxico may include reduced tax rates and refunds of 5% to 6% on net investments made in Mexico.
- MexicoFirst → program tasked with building and fostering the development of human capital capabilities.
- The 2011 preliminary results of CIO priorities in Mexico show that CIOs continue to focus on managing a flexible IT environment, with a strong focus on cost optimization. Virtualization continues to be a strategic priority for enterprises in Mexico, and Gartner believes that virtualization will find more widespread adoption because of the potential savings as a result of hardware consolidation (which is tightly linked to cost-optimization strategies).
- The adoption of cloud computing in Latin America in general, including Mexico, can be considered at an embryonic state, estimated to be less than 2% of the worldwide total. By comparison, this is significantly lower than the proportion of other IT segments, which can represent as much as 10% of the worldwide total. Having said this, CIOs in Mexico clearly see the strategic importance of deploying cloud solutions, such as integration as a service (IaaS), software as a service (SaaS) and platform as a service (PaaS), as shown in the CIO priorities for this country in 2011.
- Gartner user survey data also shows a much lower adoption rate by the IT channel in Mexico, which limits adoption outside top tier cities. Adoption so far has proved to be slow for several reasons, including higher costs for Internet connectivity (with minimal competition), which can increase the cost of cloud service delivery, particularly for SMBs.
- Telmex and Telcel remain the dominant fixed and mobile carrier with approximately an 80% share of connections. A rumored financing deal between Televisa and Nextel, which would have funded a competitive 3G network, fell through in October 2010, and competitive mobile entrant Iusacell filed for bankruptcy in December 2010. In July 2010, America Movil announced its intention to construct a 4G network in Mexico (as elsewhere in Latin America). Growth in mobile and fixed-data revenue have not been matched by value-added service offers, such as converged video, connected home or mobile TV, despite the impact of triple-play packages.

## Internal Analysis

Our internal analysis of Genesi serves to illustrate what resources and capabilities the company should have in order to implement this strategic initiative.

VRIN:

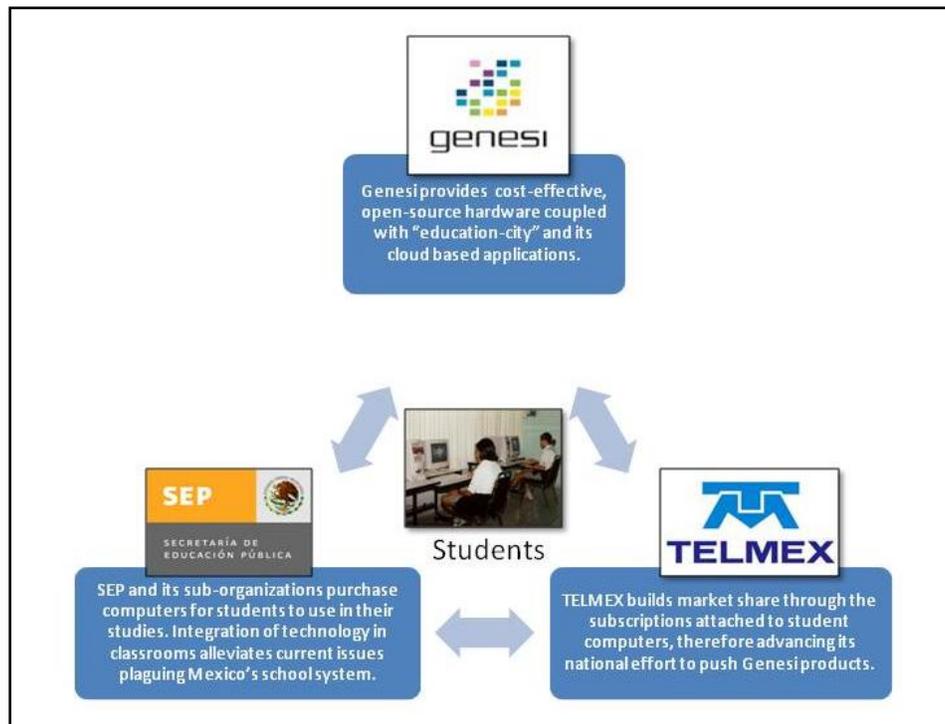
Resource	Type (ITC)	Value	Rare	Imitable	Sustainable	Bundling Rating (High, Mod, Low)
Software Developer Community	Intangible	High	No	Yes	Yes	High
Flexible Corporate Structure	Capability	Medium	No	Yes	No	Moderate
High Responsiveness to Demand	Capability	High	No	Yes	Yes	Moderate
Aura Architecture	Tangible	High	Yes	Yes	Yes	High
Capacity to Innovate	Capability	High	No	Yes	Yes	High
Ease of Manufacture	Capability	Medium	Yes	Yes	Yes	Moderate
Organizational Transparency	Capability	Medium	No	Yes	Yes	Low
ARM	Tangible	High	No	Yes	Yes	High
Power Architecture	Tangible	High	Yes	Yes	Yes	Moderate

## Value Chain Analysis:

<b>Inbound Logistics</b>
All activities involved in the receipt of inputs (raw materials, etc) and the strength of the externally sourced materials.
<i>Just-in-Time (JIT) manufacturing process</i>
Decreased inventory costs and faster response to sudden changes in demand.
<i>Relationship to Supplier</i>
Maintaining excellent relationship with Future Electronics and effectively utilizing them as a partner, so to speak.
Future Electronics continues to prove their expertise, experience, and their own ability to add value.
<b>Operations</b>
Lean Operations in coordination with the JIT manufacturing process
SMT production line with 6 sigma rating to maximize through put and minimize waste and defects of chip production
Ease of assembly of end product
Ability to customize product for the end user, i.e. user friendly platforms for use in educational setting
<b>Outbound Logistics</b>
Storage of the finished product is minimized through the JIT manufacturing process and lean operations
Shipping of finished goods under the North American Free Trade Agreement
<b>Marketing and Sales</b>
Ability to utilize advertising and promotions of TELMEX
Leverage brand recognition and market dominance of TELMEX
<b>Services</b>
Ready to use product delivered to end user
Ease of updating and maintaining through Aura and online connectivity
Product customized to application purposes

## Business-Level Strategy

The key to unlocking the benefits of Genesi's core competencies is to focus on the changing education through enhancing the student experience. Our recommendation highlights government organizations and private organizations as first tier customers. These organizations are: Secretaría de Educación Pública (SEP), Enciclomedia, Programa Escuelas de Calidad (PEC) and Comision Nacional de Libros de Texto Gratuitos (CONALITEG). Second tier customers are students who experience Genesi technology in their individual learning environments. An indirect customer involved in this relationship is TELMEX. Industry research has indicated this company is the primary internet service provider for Mexican schools. Since Genesi is pursuing a long-term relationship with TELMEX in an effort to penetrate a countrywide market, it is inherently involved in reaping benefits from this strategic approach. Connectivity is scaled up with more computers; the larger revenue stream of ISP subscriptions is a positive incentive for TELMEX.



Genesi will provide an educational platform catered to enhancing the student experience. Hardware sold to SEP and its organizations will primarily be the Efika MX SmartBook. The reason for this product push is the benefit it creates for the student experience. SmartBooks do not require additional devices such as a monitor or keyboard, making it a more cost-effective solution. Beyond simple sale of devices is the essential "Education City" service provided to end users. Education City is parallel to Cloud City. Open-source, web-based applications will be made available to students for

use in their studies. The “Aha” behind Education City is a suite of education oriented software and applications. Applications such as OpenOffice, Gimp, TuxPain Graphics Design, Tux Math and Multiplication, Virtual Microscope, KWordQuiz and Audacity are open-source software that are already being used in schools that have integrated use of web-based netbook programs.

Recently, a nationwide effort has been introduced in the nation of Spain, in which the Ministry of Education integrated open-source educational programs into core curriculum. This initiative was a combined effort with CENATIC (National Reference Center for the Application of ICT-based open source), Spain’s Ministry of Education and Janet (a U.K. based education research network). Through extensive research, this alliance published a white-paper called: “10 Reasons for Using Open Source in Education.” This document served as inspiration for the table below. Since the study was conducted, Spain’s schools have become pioneers in the field of open-source educational platforms. In the year 2009, a system of 300,000 desktop PCs running Guadalinux Linux distribution was introduced in Andalusia. The following year, a program featuring 180,000 Linux based netbooks was added to the system. Andalusia realized more than 180 Million Euros in IT savings.

Additionally, student experience is advanced through teachers supplementing class curriculum with digital materials. Engaging students with 1-to-1 computing is a promising method to alleviate major issues plaguing Mexican schools. Each student having their own personal SmartBook which they carry from class to class will provide compelling incentive to actively participate in the learning process. This educational platform is a comprehensive solution to furthering the Federal Government of Mexico’s mission to improve performance.

<b>10 Reasons to Utilize Open Source, Cloud-based Software in Education</b>	
1	Contributes to independent and autonomous training
2	Adapts teaching tools to reality of students
3	Creates a Knowledge Sharing Community ( <i>open-source development</i> )
4	Technology to the masses is individualized in choice
5	Applications evolve rapidly and respond to changes quicker
6	Advantageous cost savings in implementation, maintenance and management
7	Ensures students have same facilities at home as they do in school
8	Democratically engineered competitive educational instrument
9	Dynamic and creative learning curriculum
10	Virtual classroom fosters deeper teacher and student relationship

The product is distributed and sold directly the government and its sub-organizations. These groups then place products in schools and in the hands of students. Congruent with current relationships already in motion with TELMEX, the hardware will be branded under its corporate logo. Preliminary due diligence meetings with Genesi executives

have indicated a strategy to manufacture products in-house and deliver assembled devices to TELMEX for resale.

Pricing structure will remain consistent with current Genesi or TELMEX offerings since the cost is already far less than previous alternatives. Suggested discounts may be optional depending how the volume of products demanded. They will be sold directly to the organizations of choice for distribution and contact with the schools.

Our recommendation is for students to be the actual owners of the SmartBooks. A basic picture of ownership is as follows: a student receives a SmartBook in Grade Five; he or she utilizes this device for the entire school year and then carries it home after the school year expires. The following term, the student brings his or her SmartBook back to continue use in the classroom. Genesi's durability and expected lifespan of seven years is a competitive advantage for this model, and shall serve as a differentiator from similar products. Following the core theme behind CONALITEG, a free textbook is a social right; the concept of every child having a computer in this increasingly digital age aligns with our vision and mission for Genesi. CONALITEG is a SEP sponsored organization that provides school children with free textbooks. Our research has shown that the heavy economic burden of purchasing books is a considerable driver of high dropout rate. A new mission for CONALITEG is to digitalize its curriculum, our solution aligns with this goal and supplies a comprehensive solution for administrators, teachers and students.

A representative from Genesi will remain in close contact with SEP in order to retain focus and deliver updates on distribution and reception. Genesi is perfectly tuned for such close contact with organizations and acutely flexible to make whatever changes are necessary depending changes in volumes demanded. The project will be supported and promoted on a 1-to-1 basis throughout the entirety of its life. Persistence is the key where a change in organizations or adding others may be necessary to sustain the goal of distributing the products to the schools.

Our pitch to these organizations will be notably similar to the pitch to other companies like TELMEX or Vodafone but fashioned in a way that focuses on education and the specific advantages. Genesi will be a part of a leading market transformation by partnering with these select organizations.

## Competitive Dynamics

Genesi operates within the personal computing products industry, primarily providing licensed equipment, technology and software to telecommunications distributions.

### **5 Forces**

**Buyer Power:** The market in which Genesi is targeting in Latin America are the middle-class Business-level consumers. The Buyer is looking for a product which they can access anywhere and at a speedy rate. The consumer is looking to use a product which will cater to their specific needs in a specific circumstance, and to be reliable and consistent.

**Supplier Power:** Genesi America's offers several different packages/options when setting up a relationship with potential partners. They are unique in that they offer the services of setting up an entire assembly process for a monetary value which is a competitive advantage in its industry

**Threat of new entrants:** There are new entrants emerging every day. There are always commercial of new products hitting the market which are aid to be the latest and greatest. The sort of technology which Genesi has come up with is one of a kind for now, but there is most likely the same technology being developed and processed in a major telecommunications R&D department today.

**Rivalry of competitors:** Genesi is competing with apple mainly. The iPad is the first tablet which has had great success. Apple is very secretive about their products and is very active and responsive to the needs for new technologies. It has been pushing the boundaries and succeeding since the iPod.

**Threat of Substitutes:** The market currently has not produced a product with the innovative power saving capabilities and a Linux operating system in which the Genesi laptop possesses. The apple I-pad and other smart tablets are close substitutes with different competitive advantages.

### **Competitive Environment**

#### *Strengths and Weaknesses*

The weaknesses of the competitors are that they cannot concentrate on the netbook, tablet or cloud computing markets completely. Their products and services are so broad that they do not have quick enough response to changes in consumer taste or needs. Additionally, every error in products or services takes longer to change with such big companies.

Despite their size, many must conform their research and innovation to their business model and corporate strategy. This, in a way, limits their scope and ability to reach the bounds of creativity.

The strengths would be the cash available to put into new technology and R&D. Additionally they have established brand names and distribution channels, all of which can only develop with time and pay off in the long run.

#### *Future of Competition*

Our prediction is that these competitors will gain some revenue with their netbook ventures; it will mostly be a hit or miss depending on the company. Additionally, most of the revenue from these companies will come from their main products and sales and will take much longer to fully implement newer mobile technologies. This also will only happen if they are able to manufacture them cheaply and distribute to the right markets.

#### *Competitor Objectives*

For the most part, most of the competitors will have different agendas but common themes can be extrapolated. For example, most of the competition will not only want to use their brand names to their advantage, but also will enhance them through their products. Additionally, at minimum, the competition will want to maintain their market share of the computing industry and pierce further into the mobile computing industry. Establishing successful products in this relatively new industry will be an important objective for them. Google is the spearhead with cloud computing and they have their objectives of making most of their services a commodity, in order to virtually eliminate competition.

## Corporate Level Strategy

Establishing relationships with organizations concerned with the growth of Mexico's education system is key. The Federal Government of Mexico has made it clear that there is need for reform, and have provided funding to spark change. Partnering with SEP and its sub-organizations is a strategic approach our group is proposing for expanding into Mexico's market.

A well-recognized and trusted brand name in Mexico is needed for successful product diffusion into the market. A formal relationship has already been established with TELMEX. This company is the largest telecommunications provider in Latin America and is a perfect organization to partner with. Its national effort to sell Genesi devices under its reputable brand is pushing Genesi's technology into Mexico's mass market at a retail level.

As well as being a partner at the retail level, TELMEX will also serve as a distributor into the education system. TELMEX dominates the market for telecommunications coverage and will provide Internet services to many schools. Initial introduction of SmartBooks will be in two or more test markets depending on diligence discussions with SEP. Based off of findings of this program's effectiveness, further school systems would be selected for greater penetration.

It is duly noted that currently, there is a duality in corporate strategy. More precisely, there is a split debate in whether to pursue a "large broad-focus" or "small net positive deals". This recommendation is complimentary to both ideas. Since a countrywide effort is in place with TELMEX, targeting a more niche industry (education) helps to achieve this goal. Also, this strategic recommendation seeks to generate cash flow through a more focused approach.

In Mexico, the bigger picture should be noticed, and it begins by establishing and maintaining meaningful, long-lasting relationships with government organizations. Genesi should seek organic growth in Mexico, which will spread into Latin America over time, rather than making acquisitions. The goal is to obtain strategic relationships, which will allow Genesi to increase their market share. Need for acquisitions are diminished due to market dominance by TELMEX, a vital partner in Genesi's Latin American expansion.

Product diversification for students will stay limited to the SmartBook, because this product is most economical for pupils to use in their individual studies. The SmartTop is an optimal choice for teachers to utilize at their desks. Eventual development of tablets could lead to utilizing them in classrooms studies, effective use being teachers using them as productivity tools.

## Wrap-Up

### Financial Model:

<b>Pro Forma Statement of Income and Expenses</b>						
<b>Average Product Retail Price: \$200.00 USD</b>						
	SmartBook and SmartTop Ratio to Total Annual Sales			SmartBook and SmartTop Total Annual Sales		
	Lower Quartile	Median	Upper Quartile	Lower Quartile 50,000 Units	Median 100,000 Units	Upper Quartile 150,000 Units
<b>Sales</b>				<b>\$10,000,000</b>	<b>\$20,000,000</b>	<b>\$30,000,000</b>
SmartBook	100.0%	97.0%	95.0%	\$10,000,000	\$19,400,000	\$28,500,000
SmartTop	0.0%	3.0%	5.0%	\$0	\$600,000	\$1,500,000
Total Sales	100.0%	100.0%	100.0%	\$10,000,000	\$20,000,000	\$30,000,000
<b>Cost of Sales</b>						
SmartBook	\$120	\$120	\$120	\$6,000,000	\$11,640,000	\$17,100,000
Beverage	\$80	\$80	\$80	\$0	\$240,000	\$600,000
Total Cost of Sales	60.0%	59.4%	59.0%	\$6,000,000	\$11,880,000	\$17,700,000
<b>Gross Profit</b>	40.0%	40.6%	41.0%	\$4,000,000	\$8,120,000	\$12,300,000
<b>Operating Expenses</b>						
Salaries and Wages	22.5%	23.0%	25.0%	\$2,250,000	\$4,600,000	\$7,500,000
Marketing	8.5%	9.0%	9.0%	\$850,000	\$1,800,000	\$2,700,000
R & D	0.1%	0.0%	0.0%	\$10,000	\$0	\$0
Depreciation	0.5%	0.5%	0.5%	\$50,000	\$100,000	\$150,000
Other Expense/(Income)	2.8%	2.0%	1.0%	\$280,000	\$400,000	\$300,000
G&A Expenses	3.0%	3.1%	3.3%	\$300,000	\$620,000	\$990,000
Total Operating Expenses	37.4%	37.6%	38.8%	\$3,740,000	\$7,520,000	\$11,640,000
<b>Net Income</b>	2.6%	3.0%	2.2%	\$638,880	\$696,040	\$582,912

### Key Financial Assumptions:

- Net Income Margin: Using publically available data for 2009 and 2010, an average Net Income Margin of 4% was found for companies such as: HP, Dell, Lenovo and Acer. This was used as a conservatively high benchmark for Genesi's net income as a percentage of sales. The assumption was drawn that Genesi's net income to sales ratio would fall around 2.2% to 3%
- The Ratio of SmartBook to SmartTop sales was derived from the assumption that SmartBooks are the primary products oriented for students in this initiative. Using the average student to teacher ratio of 30 to 1, a median estimate of 97%

SmartBooks (to be used by students) and 3% SmartTops (to be used by teachers) was derived.

- Total Cost of Sales was calculated using these COGS prices: SmartBook = \$120 and SmartTop = \$80. These numbers were noted during initial due diligence discussions with Genesi executives. Using the sales ratio of SmartBooks to SmartTops, a weighted average cost of sales was generated for each sales quartile.
- Operating expenses were estimated based off of research and comparison of similar publically traded companies.
- Marketing expense primarily includes the relationship management aspect of driving sales with the SEP. This will include travel, dinner, publishing and promoting expenses.
- Salaries and Wages are estimated based off of comparable companies and their wage expenses as a ratio of sales
- Conservative estimates of 50,000; 100,000 and 150,000; were used in order to forecast sales levels for an initial implementation plan. These numbers were extrapolated from similar programs launched in Spain and California. A median sales range of 100,000 SmartBooks is merely 3.4% of the 2.9 Million 5<sup>th</sup> grade students being targeted.

## **Risks and Mitigation Plans**

With every plan, there are a number of risks associated with the pursuit of success. Understanding, preparing, and planning strategically minimizes the impact of said risks, should they ever occur. We foresee the possibility of an extended length of time, a year or more, in accruing actual funding from an organization in order to satisfy their requirements and to do due diligence on our part. Such risk can only be minimized by planning sufficiently and being prepared in full for conversations with these organizations and TELMEX in order to streamline the process. Additionally, the risk exists for a loss of funding. Whether the organization ceases to exist, or chooses to remove their financial support from the project, Genesi must have secondary organizations or means of funding ready to be implemented. Such as schools do not cease and continuously receive new classes of students, so must our support of them and their communities not fade away due to improper mitigation plans.

Adoption rate for cloud computing in Mexico is relatively slow and seemingly restricted due to the monopoly held by TELMEX. The leading cause for this is the high prices for connectivity and mobile data that TELMEX is able to charge as a direct result of their market presence. Regardless, this scenario can be a competitive advantage simply due to the fact that TELMEX has such power and influence on the market. The market is fantastically sensitive to the changes in TELMEX offerings. It regulates the adoption rates, prices, distribution, services, and promotion for Genesi's products as well as

providing established support and organizational security.

On a student basis, the risk for hardware loss or hardware replacement is always present. It is never expected from young adults to take exquisite care for their belongings, especially those that were simply given to them. However, since our plan states that the students will be the owners of said hardware, it removes the responsibility for replacement from the schools or organizations and places it on the student. This will increase care for the products and promote a student initiative to fully utilize their hardware since it will feel like their very own.

We also foresee pressure from Microsoft with regards to software. It is well understood that Microsoft has had a great influence in the education sector for quite some time by targeting students individually. It is possible, should this project fulfill its expected success, that Microsoft would respond in a big way in Mexico or even Latin America in order to maintain its market share of software. Among our defenses like rapidly accruing market share and being under the umbrella of the TELMEX brand, the simple fact that our product is based on an open source framework contains a plethora of innate advantages. Open source education promotes a democratically engineered competitive learning environment which more closely resembles the attitudes of the real world and business atmosphere. It dynamically adapts itself to the needs of the students by having applications that evolve rapidly and respond quicker to changes. The cost savings for implementation, maintenance, and management simply sweeten the already exceedingly attractive deal.

## **Measurements of Success**

It is important to have definite milestones and goals to measure achievement with any project. It helps to maintain a specific goal and to see it as an ongoing process all the way through. It is possible to lose focus on projects that extend beyond several years. In order to maximize gains, we recommend being proactive in achieving and creating goals that surround the core vision of the project.

The metric for success that most commonly comes to mind is financial income. Ideal measurements could be found by looking at increases in sales with respect to those already projected with the current TELMEX contract. Additionally, like any project, with a growing regional penetration, more schools, and additional cities, we expect to see increasing revenues.

On the side of creating consumer value, increasing the acceptance rate and growth of cloud computing, though education city, in Mexico would lead positive results all across the board. It has been known that the acceptance rate of cloud computing and open source software has been regulated by TELMEX. It would be in their best interest to not

only continue to maintain control of the market in this way, but to also provide for increased growth.

Additional metrics are found in the education statistics provided by governmental organizations such as the Secretariat of Public Education (SEP), defining enrollment, literacy, further education, and dropout rates for specific regions and the entire country. Seeing an increase in the first three and a decrease in the dropout rates with respect to other regions not affected by the project and previous years could be viewed as a social success objective.

## References

#	Source	Date	Notes	LINK
1	CENATIC Newspaper: "Open source is an educational model in itself free, democratic, sustainable and technologically competitive"	Dec-09	10 Reasons to utilize Open Source Software in Education (Article in Spanish)	<a href="#">LINK</a>
2	Open Source Observatory and Repository Europe: CENATIC Campaign	Dec-09	Article referencing size and scope of Spain's national open source education programs	<a href="#">LINK</a>
3	CENATIC Newspaper: "Spain cedes to the UK software platform adds digital educational content"	Feb-09	Article referencing Spain's co-development of open-source educational programs with Great Britain	<a href="#">LINK</a>
4	Open Source Initiative: "How Open Source Software Can Save the ICT Industry One Trillion Dollars per Year"	Jul-09	Cost savings generated through open source adoption	<a href="#">LINK</a>
5	Education Week: "Schools Combine Netbooks, Open Source"	Oct-10	Article outlining successful implementation of open source netbook programs in U.S. schools. References Tom Klein's development and selection of education oriented open source software.	<a href="#">LINK</a>
6	ETEC540: Text Technologies: "The implications for literacy and education with the development of free textbooks in Mexico's grade schools."	Oct-09	A historical study analyzing CONALITEG's mission to provide free textbooks to Mexican students. Also, a brief directional overview of its push to digitalize curriculum.	<a href="#">LINK</a>
7	Secretaria de Educacion Publica	Jun-11	General data and census figures	<a href="#">LINK</a>

8	Mexico City Experience: "Education should be at the heart of public policy, for it is through education that social issues can really be addressed."	May-11	A brief statistical breakdown of the number of schools in Mexico City.	<a href="#">LINK</a>
9	Global Giving: Educate Children in Mexico through Technology	Apr-11	A NPO organization focused on alleviating issues within Mexican schools, discusses how computers are a solution to this problem.	<a href="#">LINK</a>
10	RAND Report: Education in Mexico	Dec-05	This detailed study is intended to identify investment opportunities within the Mexican education system. It highlights introducing IT in classrooms as one potential avenue for growth.	<a href="#">LINK</a>
11	Nuffic Neso Mexico - Mexican Education System	Oct-10	A basic overview of the national education system.	<a href="#">LINK</a>
12	CISCO: Mexico Education 3.0 Pilot Program	Nov-10	An initiative between SEP and CISCO to improve teacher training and education, primarily through technology.	<a href="#">LINK</a>
13	StateUniversity.com - Mexico Preprimary & Primary Schools	Jan-11	A statistical breakdown of the total number of students enrolled in government sponsored schools	<a href="#">LINK</a>
14	<b>RESOURCES PROVIDED BY GENESI</b>			
15	Mergent: Latin America, Telecommunications Sectors	Oct-10	A comprehensive study examining the condition and scope of the telecommunications industry in Latin America	

16	Gartner: Emerging Market Analysis: IT, Mexico, 2011 and Beyond	Mar-11	A case-study discussing the current condition of IT within Mexico. Also, the article highlights initiatives in place for growth, government sponsored and privately funded.	
17	The Economist Intelligence Unit: Mexico, Telecoms and Technology Report	Oct-10	A comprehensive report examining telecoms within Mexico. The study looks at future direction as well.	