

Feasibility Plan: El Mundo de DUAM

1. Introduction

Latin America is a developing region with high levels of inequality between and within countries (World Bank, 2005). Young children suffer from such inequality in part because they received different levels of stimulus and resources in their homes. Parents of disadvantaged families do not have the time or money to invest in their toddlers and preschoolers and sometimes do not know what is best. Shady et al (2014) show how young children's cognitive development is deeply related to family income and so it widely varies between and within Latin American countries. The differences in development that emerged in early childhood don't change after age 6 and thus, this diminishes the opportunities and future outcomes to achieve social mobility. This scenario might seem pessimistic. Nevertheless, it is possible to reduce those gaps if the correct investments are done in time (Heckman, 2008). What parents do during the first years of their children's life can actually determine their development and success. Therefore, empowering parents and giving them the right tools to affront that challenge can generate a positive and lasting impact. Our project aims to provide parents with tools to strengthen their parenting and break the vicious circle of inequality.

2. Value Proposition

El Mundo de DUAM (DUAM) is a toolkit designed to support Latin American parents raise their 0-5 years old children. Its design considers state-of-the-art evidence about child development and incentivizes parents to engage in healthy interactions with their children that strengthen attachment and increase skills that promote socio-emotional and economic success.

The development of DUAM consists of two main stages. First, an application that includes diverse material for parents and children will be developed. Once the brand has flourished, a collection of books and other educational material and accessories will be produced and DUAM will be completed. All the material will be based on an educational curriculum specialized for the age and needs of every child.

Given DUAM's mission, a social impact department will be created. The area will be responsible for managing the *one-for-one* donation system and the development of non digital material and workshops to be donated to other institutions

that work with disadvantaged children. This will support deprived families in Latin America to develop the potential of their children.

Product Description: Our key feature is to combine high quality and attractive design with innovative and stimulative educational content with literacy at the core. Experts in Education and Psychology will be the team behind the readings and activities aimed to enhance different skills. We will also team up with innovative designers specialized in illustrations for children. Synergies between both types of specialists will favor the development of content that caters the need of parents and children regarding visual and educational aspects. Another advantage is that parents will be prompted to interact with their kids by establishing goals for specific skills to be developed and using behavioral nudges that will send reminders in order for them to achieve their targets and emphasize the importance of early childhood education.

Product Development: To assure a high quality product, DUAM needs to be created following the next stages: (1) Develop recommendations for the prototype phase, (2) Prototype an application testing the materials and technologies with the help of parents, (3) Define a version 1.0, and (4) Generate the rest of the curriculum to expand the products (books, accessories, games) and establish best practices for continuous learning and innovation.

Social Impact: *Why early childhood investment?* Early childhood investments are critical for the development and success of children. As Heckman (2000, 2006, 2007, 2008) shows cognitive and non-cognitive abilities determined economic and socioemotional success. These abilities critically depend on the family environment, and gaps in both kind of abilities between advantaged and disadvantaged children open up early. Nevertheless, Heckman's conclusions present strong evidence of the positive effects of early interventions on children, even for disadvantaged families.

As suggested by the work of *Harvard University's Center on the Developing Child*, a young child experiences the world as an environment of relationships, and those experiences shape the development of the brain and represent the foundation of later development.

Why empower parent-child relationship? Responsive relationships are essential in early development. According to *Harvard Center on the Developing Child* there is no evidence that supports the idea that something besides real-life

relationships can help develop a child's brain up to age 3. Also, it is important to highlight that interventions that work through parents might have long lasting effects

3. Costumer Segment

In its inception, DUAM will serve middle and high income parents of 0 to 5 years old children in Chile. At the same time, through the donation model, DUAM will reach low income parents with children of the same age group. The Chilean market was selected to launch DUAM because of its high internet penetration, income level and its awareness about the importance of early childhood investments, all in comparison to the region. Once the brand is consolidated in Chile it will be expanded to other countries in Latin America, such as Mexico, Peru, Argentina and Colombia.

Costumer Profile: DUAM has two types of costumers, private costumers and beneficiaries. Both are defined in terms of their socioeconomic status and access to internet, which are characterized for Chile in Appendix 2 and 3. Their profile is defined as: (i) *Private costumer*: 25-45 years old, parent of 0-5 years old child, college educated, family income above 1,500 dollars (IV quintile's average family income). (ii) *Beneficiary costumer*: Parents of 0-5 years old children from quintile I to III who can access DUAM through their municipalities or other nongovernmental alliances.

Market Size and Market Opportunities: According to the OECD, in the last 4 years Chile's internet access has increased from 30% to more than 60% and it is still increasing. In Chile, 752,374 children from 0 to 5 have access to internet which corresponds to 417,986 families (See Appendix 4). This is DUAM's potential market and it considers two types of costumers, those who will buy and those who will receive the donation, called beneficiaries. To further analyze the size of the market, consider the description of Chilean families per income level given in Appendix 2. Families from quintile IV and V can be seen as potential DUAM's costumers, and families from quintile III and below can be the beneficiaries. Because the internet penetration in 2012 was 61% we can assume that families of quintile III and II have access to internet. Nevertheless, there are families that can be beneficiated by DUAM but don not have direct access to internet. Given this reality, DUAM's donation model will adapt to the beneficiaries context thanks to alliances with municipalities, NGOs and others.

Once the company is stable in Chile, it will be expanded to Mexico, Peru, Argentina and Colombia. Considering all these countries, there are more than 9.5 million children from 0 to 5 with access to internet, corresponding to more than 4 million families (See Appendix 4). As internet penetration increases, the size of the market will follow the same trend in all the selected countries. For example, according to the OECD in 2012, 22% of the households in Mexico had internet and today that number has increased to more than 43%.

Social impact in the Chilean context: First, comparing to PISA taker countries, Chile's performance shows a gap that not corresponds with other measures of development. For example, PISA 2012 results ranks Chile 51st in mathematics and 47st in language, falling behind countries less developed as Vietnam. PISA tries to measure knowledge and skills that are essential for participating in society. Considering this fact, DUAM can help increase educational achievement, in this case measured as PISA score, for all the children that use it. DUAM can contribute to the development of those skills because it will empower parents and help generate engaging parent-child relationships that will promote children's creativity, problem solving skills and critical thinking. Secondly, Chile is very unequal in comparison to the region (see Appendix 1) and to other OECD countries. Chile's GINI index was 0.508 in 2011 and the average GINI index for OECD countries was 0.316 in the late 2000s. Segregation implies the existence of non trivial gaps in the resources, time and information that parents have. In this context, we consider that the donations of DUAM can contribute to reduce inequality.

4. Competition

Current players in the market lack the combination of the features of DUAM. However, there are indirect competitors in different levels in the US and Latin American Market:

A Story Before Bed. This app provides parents with the opportunity parents to record themselves reading a book for their children.

Daniel's Tiger Neighborhood: TV show aimed for preschool aged children based on a curriculum focused on child development. This television series has developed a world with toys and books.

Baby Time, BabyCenter, Learning 4 kids and other web-based support: Guidance and tips on how to educate their children and activities for parents and children.

Caramba, Ninots and De Magia y Carton: Sell educational and creative toys.

Baobab: Educational toys and material provided by Baobab through municipalities. Parents can use and exchange toys for free in parks.

Personal networks: Parents rely on their personal networks to obtain information about parenting.

5. Intellectual Property

Our venture will rely heavily on the fact that design and content will differentiate the product and will be one of its most attractive features. Therefore, it will be crucial to protect its Intellectual Property. Trademarks in Chile, after being accepted, are protected for 10 years since the year of registration and afterwards can be renovated indefinitely for periods of 10 years. Additionally, designs and drawings can also be registered.

6. Customer Engagement

Customer engagement will rely on several strategies that will be determined by the phase of the venture. The main goal is to create a brand and a “world” that generates an attachment between children and the characters while parents get high quality educational material.

Advertising and word of mouth will be the main communication channels to get to customers. In the first stage a free trial mode will be offered so parents can download the application and try it for free. To keep and grow the customer number, we will use a referral model in which if parents get friends and family to subscribe they will get three free months of use for each people they refer.

In a later stage we will divide membership into standard and premium so that parents in the premium content get exclusive access to new content, specialized guidance and special events and workshops in the stores. Besides, new content and new characters will be gradually launched so parents and kids remain engaged. Also, parents will get discounts and special promotions for the physical accessories when they reach key milestones in their goal tracking in order to incentivize the use of the app and the interaction with their children.

7. Revenue Model

Pricing: Monthly fee of 3 US\$ per child for the access to the content of the application to people that can afford it. The fee was decided after in depth interviews with Latin American parents and it was chosen because it can be perceived as a non-relevant small fee for people that have internet at home. The company will also have a social department that will focus on giving access to the application and to the content in other formats for free to segments that do not have the money to pay it or internet access.

Referrals: A key issue in the strategy of DUAM is to grow fast. In order to achieve this, the revenue plan includes a referral program. Based on an interview with the founder of Poncho (weather forecast provider new venture) we estimate that around 10% of costumers are going to recommend the application to someone else. This is also considered in the revenue estimation.

Revenue: The project considers using digital advertising with an efficacy of 3% during the first 3 periods in each market. This means the percentage of people that download the app after clicking on the advertisement. We also analyze the scenario having a 2% efficacy. This exercise reveals that growing fast is the most important factor in the strategy of the venture. The analysis also considers the revenue effect of the referrals. The exercise includes the first 2 years, considering just the Chilean market for the first year and adds the Mexican market for the second.

The break-even is reached after 11 months using the 3% internet advertising efficacy and after 18 months using the 2%. And the NVP of the project using a constant revenue from the 2nd year on and considering the first 5 years is \$5.2M for the 3% and \$2.8 for the 2% scenario. In Appendix 5 there are details on the cashflows, breakeven points and market penetration.

8. Operations

DUAM will focus on creating material connecting state-of-the-art content with practical advice to parents. Therefore it will be key to higher highly qualified experts to develop the material and this is will be translated into higher costs. The cost of the staff will include 8 professionals and it will cost \$272.000 a year. The development of the app will cost \$60,000. All the details are in Appendix 11.

As mentioned in the previous section, growing fast is the most important dimension of the strategy. The Venture considers spending \$150,000 in sales and advertising a year, that will be spend when entering to a new market. Other important costs are summarized Appendix 11.

9. Management Team

Managers: **Andrea Arévalo** (Founder, former consultant at the World Bank, Economist from CIDE, Mexico, MPP the University of Chicago 2015), **Alberto Garrido** (Founder, Former assessment director at Aptus Chile and branding consultant at BrandAsset Consulting Chile and Australia, Industrial Engineering), and **Esperanza Johnson** (Founder, Master in Economics Universidad Catolica de Chile, former Lecturer and Research Associate in the economics department PUC-Chile. MPP the University of Chicago 2015)

Advisors: **Susan Mayer** (Professor, University of Chicago), **Anjali Adukia** (Assistant professor, University of Chicago), **Gregory Bunch** (Adjunct professor of entrepreneurship, University of Chicago), **Caterina Platovski** (Former Chief of Language Curriculum, Ministry of Ed. Chile), **Rafael Lopez** (Founder of Sexto Piso and Hueders, Publishing Houses), **Piero Solari** (Stakeholder at Fallabela retail store. Vice President Aptus Chile), and **María Paz Ardito** (Clinical Psychologist, Infant Mental Health Specialist at Erikson Institute)

10. Progress to Date

Up to date we have done research in early childhood education and development and the needs and behaviors of Latin American parents of children from 0 to 5. From the research we established a solid theoretical and evidence-based analysis to support a social enterprise such as DUAM. Also, the research helped us establish the first guidelines of DUAM's curriculum, which are mentioned in its description. Also, we developed a survey that was applied to more than 70 parents from Chile and Mexico to have a sense of the needs and behaviors of our potential customers. This survey provided relevant insight about how parents like to spend their time with their young ones, what skills do they hope to develop in their kids and what tools they would like to have in order to do so. These results helped define DUAM's strategy. The complete results of the survey are in Appendix 6.

11. Business Risks

Intellectual property: Our business must be able to protect the content and design to avoid copies by competitors. We will tackle this issue by protecting the rights.

Securing payment and personal information: Online payments and personal information are subject to theft that can derive in identity theft. To mitigate risk a specialized IT team will be contracted.

Inability to secure fast growth: Digital marketing, referral program and aggressive entry to other markets. Mexico as a second market.

Competitors' response: There could be the case that new players try to emulate our model with the creation of their own content and designs. Therefore, it is crucial that our brand grows quickly and profits from the lack of direct competitors in the first stages.

12. Business Analogs

There are several evidence-based initiatives that provide guidance to parents in order to develop their children and empower their role, strengthening parenting:

Thirty Million Words Initiative (TMW), The University of Chicago: Parent-directed program that enhances a child's brain and impact his or her future through the power of language.

Center on the Developing Child (CDC), Harvard University: Generates knowledge and innovations to benefit disadvantaged children.

Encouraging Your Child to Read, Harvard University: Provides guidelines to encourage reading and recommends activities and books for children of different ages, from 0 to 9.

Chile Crece Contigo (ChCC), The Government of Chile: Governmental program that provides online information to parents about early childhood education.