

Colombia in the global videogame industry: More than an emerging industry in
more than an emerging country

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Author Bio

Camilo Gomez is currently manager for Medellin Smart Services, a business development and cooperation entity created by 18 tech companies from the city. He was the co-founder and director of C2 Game Studio. He was also member of the board of directors of the Colombian Chapter of IGDA (International Game Developers Association). He previously worked in the telecommunications industry in projects in Israel, Hong Kong, Costa Rica, USA and Taiwan. He is a systems engineer from Universidad EAFIT and is currently finishing his Master of International Business in the same university.

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Abstract

Purpose The article aims to detail the internationalization strategy of a video game company in Latin America. It first analyzes different internationalization frameworks. And finally, it does apply those frameworks to the specific case of independent video game studios in emerging countries

Design/methodology/approach The research reported in this paper relied on an auto-ethnographic case study of C2 Game Studio. It compares the company with the game industry in Colombia provides insights of the company's successful internationalization strategy.

Findings The considered internationalization theoretical frameworks for this study were theory of international operations, the product lifecycle theory, the stage theory of internationalization and leverage linkage and learning. The best fit for C2 Game Studio's internationalization strategy was found in the international new ventures framework and suggests that other independent video studios tend to behave similarly.

Originality/value Colombia is not internationally known for its video game industry. Given the effort that emerging countries are putting on creating new video game initiatives, this paper offers valuable lessons to government institutions and game companies in Latin America and the world. It also provides application on existing conceptual and theoretical frameworks to a specific industry.

Keywords international new ventures, video game studios, video game industry, case study, ethnography, rapid internationalization, internationalization strategy, emerging markets, Latin America, Colombia,

Article Classification Research paper

1. Introduction

The global video game market is experiencing great growth. It should increase from \$58.7 billion in 2011 to \$83 billion in 2016, growing at a 7.2 percent compound annual (Global entertainment and media outlook: 2012-2016, 2012). Yet, the game development sector has not been researched extensively and has potential for additional investigation (Cunningham, Loane & Ibbotson 2012). According to the World Bank (2011), emerging economies will generate most of the global economic growth by 2025. This has increased attention from the international business community to the topic (Hoskisson et al., 2000) and calls for additional studies regarding the internationalization of emerging markets have appeared (Diaz & Vassolo, 2012; Gaur and Kumar, 2010). There are few studies that have targeted the internationalization process of Latin American countries aside from Brazil and Mexico (Arbix, 2010).

The focus of this research is game development studios in Colombia. It is based in an emerging economy that formally applied to enter the OECD in 2011 and is currently in accession discussions with this organization (Office of the Spokesperson Washington, 2013). Colombia has the highest Information and Communication Technologies penetration in the region (Caracol, 2010) and cities with high innovative potential (Moreno, 2013). The country also has a very brief history of game development with only five companies active in 2008.

After a literature review, a case study of one Colombian video game studio is presented and then viewed through various theoretical internationalization frameworks in order to find which fit best for providing an interpretation of its internationalization processes. Then the conclusions for understanding the internationalization process of small video game studios in Colombia are drawn.

According to Villamil (2013), the manager for digital contents of the ministry of ICT (MinTIC) of Colombia, Jorge Restrepo stated they invested COP \$60,000 million in 2012 to strengthen the digital content industry of which video games are part. The digital content industry reported exports for US\$7 million on 2011 and US\$19 million on 2012 in Colombia (Villamil, 2013). It is clear Colombia's government interest in the game development industry has increased and the country is currently trying to take advantage of its dynamic growth.

Colombia has some important initiatives focusing on digital content that affect video game development. The Ministry of ICT has its Vive Digital Plan ("Política de promoción de la industria de contenidos digitales v2.0[1]"). Innpulsa Colombia [2] actually brought Dr. Daniel Isenberg, a Professor of Entrepreneurship practice of Babson College, for a forum about the creation of an effective ecosystem for innovation and new ventures ("Innpulsa Colombia," 2012). Ruta N [3] promotes innovative businesses based on technology in Medellín. Colombia 3.0 is the national summit of digital content held in Bogotá. Aside from the government, one of the key players in the ecosystem is IGDA Colombia [4], a non-profit membership organization with the objective to foster the game development ecosystem.

The video game development activity in Colombia has virtually skyrocketed from having almost no companies in 2009 to 47 companies in 2013 focused on developing video games with the majority based in Bogotá with 21 companies and Medellín with 12 according to IGDA Colombia (2013). One of the biggest reasons for this growth has been the reduction of one of the main entry barriers to publishing games. Due to digital distribution platforms, there is no longer need for physical distribution of games and they can be sold to many countries without an international distribution network (Rietveld, 2011). One of the Colombian video game companies that has successfully internationalized is C2 Game Studio. Given the effort that emerging countries are putting on creating new video game enterprises (Estrategia.cl, 2013; Tian Fu Software Park, 2013), this paper offers valuable lessons to government institutions and game

companies in Latin America and the world, and it also provides theoretical and conceptual contributions to existing internationalization frameworks.

2. Literature Review

The main objective of this research is to answer the question of which existing internationalization theoretical framework best fits the internationalization process of C2 Game Studio? The case study will help to also answer how is the internationalization process of C2 Game Studio viewed through the selected theoretical frameworks?

The company will be analyzed through the following frameworks:

Hymer's (1976) Theory of International Operations focuses mainly on foreign direct investment of national companies, its risks and extra costs such as the cost of information and communication, the cost of less favorable treatment by the host country's governments and costs of exchange rates. He also focuses on its determinants, mainly market imperfections such as imperfections in the goods markets, in the factors markets, economies of scale and governments' involvement with production and trade.

Another well-known theoretical framework for internationalization is Vernon's (1966) Product Cycle Theory where geographical proximity is key to opportunity responsiveness for new product development. Developing countries are seen as strategic for competing with price only when the product is in a standardized or mature phase.

Johanson and Wiedersheim-Paul (1975) set the foundations for the stage theory of internationalization, they propose the internationalization process of firms is done gradually in order to reduce risk and maximize learning, they also define two factors as the key to selecting the countries of entry, psychic distance and market size. Later Johanson and Vahlne (2009) return to The Uppsala model, and explain it as the internationalization process of the firm as a result of acting in order to strengthen their network position and thus being able to better exploit opportunities. Two very important concepts are, *insidership* in networks in order to be successful in them as well as the liability of *outsidership* where a company suffers complications when doing business with no previous relevant network in that country (Johanson & Vahlne, 2009). The authors give great importance to business relationships, learning and commitment, which are key to small game development firms. They also relate internationalization with entrepreneurship, which struck a chord with the internationalization process of such small firms.

Oviatt and McDougall (1994) present a newer theoretical framework that exposes a growing trend in international business. That is, companies who look to gain competitive advantage from resources in various countries since birth. They propose a framework that explains the four elements that make a company an International New Venture:

The new venture should have Internalization of some transactions, meaning, the company should add some value somewhere in order to gain economic benefits in transactions. This, however, does not mean ownership of foreign assets. Due to reduced resources, the new ventures will flock toward Alternative governance structures. These tend to be hybrid structures like franchising and licensing with partners or network structures. International New Ventures will find Foreign Location Advantage in moving resources (like knowledge or software) through different countries, then combining them with resources in the new country. These companies will also have Unique Resources such as previous experience, contacts, organizational culture or management style.

Mathews (2006) also proposes a new theoretical framework developed from the point of view of challenging enterprises from developing countries. The main aspects of this framework are Linkage, Leverage and Learning. Linkage refers to companies searching on external advantages mostly found internationally. This way challenger firms can counterbalance lacking resources by accessing or forming networks such as partnerships or joint ventures. Leverage focuses on the resources and how companies can imitate, transfer or substitute them. Learning will come to the company through various iterations of linkage and leverage.

Cunningham, Loane and Ibbotson (2012) study the internationalization process of small video game

studios in Poland and Hungary. The authors found that the analyzed game companies had rapid internationalization processes. The companies also had few resources, the founders lacked international experience. They operated in pre-natal stage years before legalizing them. The firms also relied on outsourcing key personnel in order to survive with fewer resources and gain knowledge faster and finally they mostly depended on their publishers for entry and speed of growth. It will be interesting to see if the internationalization behaviors of game studios from countries with big psychic distance with Colombia such as Poland and Hungary are similar to C2 Game Studio's.

All the reviewed theoretical frameworks give a different point of view for understanding the internationalization process of firms. Some of them seem to better relate with the general characteristics of small technology companies from developing countries than others. However, thoroughness with the selection of frameworks might give a broader view of the different internationalization processes and thus, stronger bases for finding the one that best fits C2 Game Studio's behavior.

The result of this case study will provide insights into the general research question. There are no extant studies regarding the internationalization process of the Colombian video game industry; therefore, this study can serve as a starting point for future research. In regards to managerial contributions for the game development entrepreneurs, the proposed analysis will find an existing framework, which will guide them to focus on key aspects in order to accelerate their internationalization process.

3. Methodology

The proposed methodology is similar to the one used by McDougall, Shane and Oviatt (1994). First they try to explain 24 case studies with five internationalization theories, which are: Product cycle theory, Stage theory of internationalization, Oligopolistic reaction theory, Internationalization theory and Monopolistic advantage theory.

This study was key to the present paper as it tries to take a similar approach to examine the C2 Game Studio case through various existing frameworks and find the best fit amongst them. On the first section of this research, an ethnographic case study of C2 Game Studio will be compiled.

Ethnography is an open-ended iterative process (Sharpe, 2004; Visconti, 2010). It is reflexive and constructivist and can only be achieved by being part of the company to be researched in order to thoroughly understand its behavior (Whitehead, 2005). Auto-ethnography is a perfect mechanism to use the author's personal experience as director of the company since its inception. It will be a narrative description of the internationalization process of the firm focused mainly on the company's change from their old business model to an international market with a timeline of its major events (Genzuk, 1999).

On the second part, some international business theoretical frameworks will be analyzed with the case study in mind in order to determine which one or ones have the best fit.

According to LeCompte and Goetz (1982), the main problem with ethnographic researches is that they are sometimes labeled as unreliable, with little validity and generalizability; however, the contribution of an ethnographic research lies in the data gathering that leads to a hypothesis formulation. This will prove useful for future research in this area.

4. Case Study

On November 2010, C2 Game Studio had survived for three years developing interactive 3D applications for the Colombian market. The company's founders Camilo Gomez, its business director and Luis Correa, its technology director had acquired some very important national customers for their work for hire services. After visiting the Unity Developer Conference in Montreal they came back with the idea of pivoting the company to develop video games with their own IPs (Intellectual Properties). If they took this road, they would enter a hit driven industry with high risks, but even higher payoffs. In order to do this, they would need to redefine their whole business model as well as to plan an internationalization strategy to allow them to sell their games abroad.

4.1 Background to C2 Game Studio

C2 Estudio S.A.S. officially started out in February of 2008 in Medellin, Colombia with two friends that wanted to develop video games. The co-founders met at EAFIT University in Medellin, Colombia where Camilo Gomez graduated as a systems engineer and later moved to work as an application engineer in telecommunications in Israel, Costa Rica, Hong Kong, the US and Taiwan. Luis Correa left after four semesters and obtained his Bachelor of science in real-time interactive simulation from The Digipen Institute of Technology in Redmond Washington, USA. After graduation, he worked as a feature programmer for Midway Games in their Chicago office on a Playstation 2 game called NBA Ballers Phenom.

The entrepreneurial team started working in October 2007 without formalizing the company. The prenatal stage lasted for five months until they signed their first contract. The team chose as their main development tool a promising new 3D game development engine from Denmark called Unity. Acquiring resources was a challenge for the firm, as the entrepreneurial team had no previous business experience. They initially hired a 3D artist, but they moved to a hybrid structure and started working as a team with another company from the city called Sky Branding that took responsibility for 3D modeling, user interface and animation in most of their projects. The music and sound were also externalized to a third company called Volta Estudio, a local music studio. The company offer was to develop interactive real-time 3D applications. Their main lines of products were: Virtual Environments, Simulation and Virtual Training, Advergames, Serious Games and Information Systems Visualizations.

One of the biggest challenges for C2 Estudio during this phase was that there was no previous knowledge of Interactive 3D applications in the national market so there was no known need for them. Part of the sales process was to educate business prospects about such applications and their benefits. Due to the cost of the projects, only big companies were able to afford the services of the firm, which reduced drastically the available local prospects worth contacting. The third and biggest challenge was the duration of the sale cycle. The combination of the need to educate customers about the possibilities of 3D applications and the big size of the companies (bureaucratic procedures, budgeting for the whole year and contracting restrictions on election years for public organizations) meant that it took a long time to close a sale.

Personal and business networks played a key role in the acquiring of customers for C2 Estudio. Through these networks they were able to work with some of the biggest corporations in Colombia such as with SENA, the National Learning Service of Colombia, EPM (The biggest utility company in Colombia, The Colombian Chamber of Construction, EXITO (A chain of large department discount stores in Colombia), Nacional de Chocolates (The biggest food corporation in Colombia), EAFIT University (one of the most important private universities nationwide) and ISAGEN (The third biggest energy generation company in the country).

Thanks to their early relationship with Unity, the company was able to become the official Colombian

reseller for the software. The firm also became the official Colombian reseller for an English 3D software company that specialized in visual merchandising.

At the end of their first three years, the company had a stable group of customers with some promising future projects to work on. However, since its conception the company started evaluating international opportunities. In November 2007, they attended the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) in Orlando, FL. In 2009 and 2010 they visited the Game Developers Conference (GDC) in San Francisco, CA. As mentioned earlier, they also attended the Unite Developers Conference in Montreal in late 2010.

It was in this last conference where the entrepreneurial team finally thought they could take advantage of the changing video game industry to pivot their own business. The iPhone, which was initially released in 2007 combined with Apple's App Store had disrupted the industry by digitally distributing quality games to their touch, mobile devices for as little as one dollar or sometimes even for free (Goldberg, 2012). This new technology allowed game studios to develop small games with small teams and distribute them worldwide through platforms like iTunes, Amazon Store and the Playstation Network without incurring in the costs and logistics associated with physical products. This has been labeled as 'artist-led-distribution' (Clemons, E.K. & Lang, K.R., 2003)

With this great opportunity there would also come big risks. The game industry is hit-driven in nature, with few titles becoming great blockbusters and a long tail of lower selling products (Matthews, 2012). Also, the development cycles for a commercial game were much longer and demanding than for any project the company had previously undertaken and this meant having enough capital to survive while the product launched without having a constant revenue stream. In order to adapt to this new model, the company would also have to learn many new skills such as game design, higher technical and optimization skills to develop for mobile devices, international business development to get publishers for their games and in general raise their competitiveness to international standards.

The big decision the team needed to make was either to stay local and safe with their current customers, surviving comfortably or take a leap to the international market of mobile games.

4.2 The Pivot

The company finally decided to pivot and focus on developing mobile video games for the international market. Even though the risks were higher, they believed that staying in the local market with only a few big customers would not be taking advantage of the opportunity window presented to them. They also believed they had the potential to develop high quality, competitive games that could be enjoyed worldwide. They knew this would be the beginning of a process to acquire the skills, experience and contacts needed in order to succeed, but potential payoffs were much higher than if they didn't act.

The team immediately started planning their first game. Their main objective was to make a game that people everywhere could relate to. They needed a setting that people from different countries understood. The team finally decided to do a cowboy game as they assumed the iconography was known throughout the world. The art style chosen for the characters was a chunky format similar to Lego figures to make it appealing to different ages. Sky Branding took care of the character design, modeling, rigging, animation and user interphase. Volta Estudio was called upon to compose the soundtrack, which was highly influenced by Ennio Morricone's spaghetti western soundtracks of the 70's. The story was defined and the development started on January 2011.

The game initially took four months to develop. When the team felt the game was almost finished, the company started thinking of ways to market it in the App Store. The competition in this distribution platform is very high with hundreds of games coming out every day so lack of marketing capabilities, no

relationship with the content curators from the store, organizational reputation and general discoverability issues were a big problem which could be solved via publishers (Colombo, Grilli & Piva, 2006).

They started evaluating the possibility of working with a publisher in order to help them with the marketing and PR for the launch of the game. After evaluating various options they chose their publisher for two main reasons: This launch would give the company credibility in the game industry, as the publisher had been responsible for some very big mobile hits. Secondly, they offered to provide an executive producer and give feedback on the game. The creative team valued this most of all, as they saw a great opportunity for knowledge transfer from industry experts into the company. The feedback and improvement process of the game lasted four more months, which was much longer than the company had expected, but the experience gained through this period proved to be quite valuable on their future games. Cowboy Guns finally launched on September 2011. It was featured on the games' section of the App Store, on the New and Noteworthy section and on the what's hot section on 48 countries including the US. It was also featured on the Staff favorites section in Australia and New Zealand. The game reached over 35.000 paid copies and had over 100.000 free downloads in 146 countries on its first year. It also won a very important Colombian design award called "Premio Lapiz de Acero" on the applications category in 2012.

After this project, the team believed to have succeeded in having developed and launched a high quality mobile game. They felt they had the potential to do even better as they gathered more experience, knowledge and contacts in this new venture. They also stopped both of their software reselling relationships in order to focus on mobile game development.

The company now went through an image change that better portrayed their new international game development focus. The new name selected was C2 Game Studio, which kept the C2 for branding recognition, added the Game interest and changed the Spanish "Estudio" for its English translation. A new logo and website were deployed to focus on their international image.

In 2012, C2 Game Studio was invited to participate in a growing community of game development in Colombia called IGDA (International Game Development Association) that had around 10 registered companies at the time. The non-profit group was focused on nurturing the game development ecosystem in the country and Camilo Gomez became a member of its board of directors and responsible for events in the city of Medellin.

After their makeover the company started to plan their new game. They wanted to use the lessons learned from the last game to make a better product that hopefully would have more impact on the big game markets (The US, Europe and Asia). They wanted to create a strong intellectual property (IP) that people could relate to. The team felt they had moved in the right direction with Cowboy Guns with the look and feel of the game, but they needed stronger characters this time. They also wanted a simpler game that was easier to play but difficult to master and which was also specifically tailored for touch devices.

The new game was named Nitro Chimp, in honor of its main character. Nitro Chimp was about a speed hungry daredevil-ape that races his motorcycle against his main contender Mongo (a cheating gorilla). The game was an endless racing game with some social features to hopefully make it go viral.

This time around the team signed a publishing deal with the same publisher they launched their first game but right at the start of production. Their hope was to add to the team, the experience and insights of the executive producer from the publisher from the beginning in order to accelerate the development and learning processes. This proved out to be a bad decision for the company. The publisher took a relaxed approach and patiently waited until the game was at a more mature stage and then provided their feedback as usual.

The Colombian government started showing interest in the industry at around this time. Proexport, the agency in charge of promoting exports, organized an exploratory mission to GDC and Game Connection.

C2 Game Studio had already been to the Game Developers Conference, but had not attended Game Connection, a more private event held in San Francisco on the same week as GDC. The event proved to be a great opportunity for the company to get feedback for Nitro Chimp as well as to expand their network of service providers and publishers for their future projects.

On October 2012, the Ministry of Information and Communication Technologies of Colombia organized Colombia 3.0, an event that united that focused on the digital content industry. The conference had 8 international speakers from the game development industry. Camilo Gomez was one of the national speakers and was able to take advantage of this opportunity to increase his international network. Three of the international speakers proved to be great contacts for the company. One of them soon became advisor for the board of directors of C2 Game Studio, another one became game design consultant thanks to the support of Ruta N. And the third one was hired by Proexport as consultant for the Colombian video game industry and shared openly his contacts in the US with the company.

Nitro Chimp launched on December 2012, but it did not get as highly featured as Cowboy Guns. It was on new and the noteworthy and great for iPhone 5 categories on more than 48 countries, however, it wasn't featured on the main Games section of the App Store because of other games with well-known IPs launched on the same day. The business model for this title was Free to play (F2P) meaning the download was free and there were In App Purchases (IAP) available for users. Players could buy the in-game currency and with it acquire items to personalize the character or vary the gameplay. The game was downloaded more than 680.000 times on its first six months and had a nomination for the "Premio Lapiz de Acero"[5] on the applications category.

On March 2013, Proexport [6] organized another international mission to GDC and Game Connection. By this time the Colombian chapter of the IGDA had around 45 registered companies and 20 of those visited GDC with 7 participating in Game Connection. The relationship between national game companies from IGDA had matured to a point that most companies in the organization felt there was a strong industry community. During the past year, there had been around 8 local events between Bogota and Medellin focused on integrating the community and sharing industry experiences.

Since this was the second time C2 Game Studio participated, they now had two published games to show. C2 Game Studio was able to make great connections and get more interest from publishers for their future projects. They were able to sign two games, one with a US publisher and one with a Korean one. The key aspect here is that both of the publishers were willing to risk monetary resources on the projects. This meant that the level of commitment on production, marketing and PR from the publishers would also be increased as they now had a direct investment in the games.

The company saw one big risk in this opportunity; managing two projects at once could become cumbersome. The entrepreneurial team addressed this by hiring a programmer/project manager with very good experience in technological projects (although with no direct experience in game development).

At the time of writing, in mid 2013, the company was in development of both games and planned to launch them in 2014.

4.3 Internationalization results

To understand the impact this pivot had on C2 Game Studio, one can look at the ratio of foreign sales to total sales in 2010 compared with 2012. It moved from 0% to 94% with only small remnants of support to old projects accounting for the local 6% of sales.

Some of the key moments in the firm's internationalization process are summarized in Table 1. It is evident that the company had an international perspective since its inception.

(Table 1 goes here)

4.4 Colombian Game Industry

To understand the Colombian video game industry's status and C2 Game Studio's position in relation to other companies in the country one can look at the "Oferta Nacional De La Industria De Contenidos Digitales"[7] research implemented by Proexport in 2012. Some of key internationalization indicators are summarized on Table 2.

From a total of 56 video game companies that were surveyed, the Median for total direct and indirect employees was 7 with C2 Game Studio having 6. 23 companies develop games with their own IP, meaning they have a product mostly aimed internationally as C2 Game Studio does. 33% of the companies distribute their games through the App Store. 68% of the companies have gone through some sort of alliance or cooperative projects with other companies. 58% of the video game studios consider they know the international market very well and 71% of the companies have been to international industry events such as GDC and Casual Connect. 40% of the game companies have made business contacts with international publishers from the US. 54% of the companies have not exported any games and only 7% of the companies export more than 80% of their sales ("Proexport," 2012). As we can conclude from this study, C2 Game Studio is one of the leading game companies in the country, but there is a nascent industry in Colombia with firms that present similar characteristics and behaviors.

(Table 2 goes here)

5. Case analysis based on theoretical frameworks

5.1 Theory of International Operations

Hymer's (1976) Theory of International Operations as reviewed by Dunning and Pitelis on 2008 is exposed to not give enough importance to learning by developing countries and competitors. C2 Game Studio has strongly focused on learning and knowledge transfer as a key part of their internationalization strategy. Hymer also ignored government policies that support development, which in the case of Proexport proved to be crucial in the company's internationalization process. Hymer also believed small firms could not compete against large Multinational enterprises, which, has been widely proven wrong since his time (Teece, 2006). These specific points prove Hymer's framework does not fit with small Colombian video game studios' internationalization process.

5.2 Product Lifecycle Theory

In the Product Lifecycle Theory, a producer in a specific market will be more likely to see new product opportunities in that market than competition based abroad (Vernon, 1966). This indicates that, if Colombian video game studios want to enter the global market, they will need to open subsidiaries in the leading regions of North America, Europe and Asia in order to gain market insights for product development. C2 Game Studio seems to be focusing on making alliances in those countries rather than investing in creating or acquiring subsidiaries there. Also, developing countries are seen only as strategic for competing with price when the product is in a standardized or mature phase, not as innovation spots for product creation due to the technological gap they have compared to developed countries (Posner, 1961). As Cantwell (1995) has shown, innovation activity behaves differently than how the product life cycle suggests. These reasons show that the Product Lifecycle Theory does not explain C2 Game Studio's internationalization process

5.3 Stage Theory Of Internationalization

The stage theory of internationalization from Johanson and Wiedersheim-Paul (1975) focuses on risk reduction by having an evolutionary internationalization process that helps companies to acquire resources and experience gradually. The Uppsala model is proposed after analyzing four Swedish firms, two from the XIX century and two more from the 1920's. However, this behavior does not seem to be consistent with small software development firms as Bell concludes (1995). Psychic distance does not seem to affect the decision for the country of entry to export due to advances in telecommunications and digital distribution. C2 Game Studio's process was almost instantaneous, after making the decision to internationalize, the company moved to the global market in less a year. Johanson and Vahlne (1990) reply to some criticism the model received regarding its applicability only to companies that come from industrialized countries of smaller size or only fitting with manufacturing firms. Their answer relied on various studies that point to the model being more general. The authors (2009) focus on networks, business relationships, learning and commitment. This makes the Uppsala model interesting for seeing the internationalization of game companies. Due to its stage-structured process this framework is not the best fit for C2 Game Studio.

5.4 Linkage, Leverage and Learning Framework

The Linkage, Leverage and Learning framework offers some good explanations for C2 Game Studio's internationalization process when viewed as a challenging enterprise from a developing country (Mathews, 2006a).

The company's effort to create a solid network of publishers and providers is explained as the linkage aspect. This framework is dynamic and underlines the usage of external resources, which fits perfectly with C2 Game Studio's behavior (Mathews, 2006b). (As the leverage demonstrates how the firm focuses attaining experience and knowledge transfer from its publishers. Each project is improved by previous experiences. Thus generating Learning in this cyclic process.

The most attractive insight of the framework proposed by the author is that latecomer video game studios from Colombia can enter big markets through Linkage, Leverage and Learning with less resources and international experience than their bigger and more experienced counterparts from developed countries.

This theoretical framework might be used to understand the internationalization process of C2 Game Studio, however Mathews (2006) mainly uses it to explain the behavior of challenging big MNCs from the periphery that compete against defending MNCs from developed countries which behaviors can be explained through the OLI framework.

5.5 International New Ventures Framework

When viewing C2 Game Studio through International New Ventures as explained by Oviatt and McDougall (1994) the first key aspect is that since the pivot the company has strived to gain competitive advantage from resources in various countries. The firm also seems to fit in well with the four main characteristics that define International New Ventures.

The company internalizes the transactions of game design and game programming. It has proven it does this with a high quality level capable of competing internationally. The studio does not own any foreign assets.

C2 Game Studio's strategy focuses on creating and nurturing hybrid structures with their publishers. This is highly related to growing and maintaining an international network and thus being able to spot new opportunities within this network.

Through their publishers, the firm is able to obtain Foreign Location Advantage. The company also gains knowledge as well as tools and software from external providers. It integrates all of these with the skills and experience of their local team.

C2 Game Studio does have unique resources such as the previous international experience from both of their founders and specific video game technical experience from one of them. The team can find opportunities others can't due to their skills, network and background (McDougall, Shane & Oviatt, 1994). Through these two years they have been able to adapt their organizational culture and management style to a highly flexible and competitive structure that allows them to survive, develop more projects, grow their network and attain more knowledge and experience.

One of the risks for the C2 Game Studio with hybrid structures is the danger of opportunism from their publishers which can be diminished through various iterations of game launches (Larson, 1992).

Oviatt and McDougall's (1994) framework seems to be the one with the best fit for C2 Game Studio as it addresses all of its internationalization process characteristics.

Table 3 shows a comparison of the frameworks and the reasons why they either fit with the internationalization process of the company or not.

(Table 3 goes here)

6. Discussion

The main characteristics found in the company analyzed in the case study were a rapid internationalization process due to an international view of the market, few resources, pre-natal stage operation, outsourcing key personnel, the creation of networks to improve the detection of opportunities and the formation of hybrid structures in order to attain knowledge and balance their shortcomings.

Previous research from Cunningham, Loane and Ibbotson (2012) came to similar conclusions with small video game studios from Poland and Hungary. The company in the present case study has very similar behavior than what the authors found in the game companies they analyzed. The only difference in these findings compared to C2 Game Studio is that both of the founders of this company did have previous international experience, one of them on the video game industry. The case also fits in well with the findings from Varma (2011), where Indian born global IT companies are led by people with previous networks as well as international and technological experience that allow them to take advantage of new international opportunities.

From Table 3, it is evident that the linkage, leverage and learning framework (Mathews, 2006) has some interesting insights worth mentioning. Partnering with international companies and learning from their technological and organizational experience while also taking advantage of their image has been proven to help Latin American companies grow their internationalization process (Bianchi, 2014). Video game studios from Colombia can benefit from applying these three aspects to enter the global market and challenge companies with more experience and resources. This framework does not contradict the case study or the international new ventures point of view it merely encloses it differently.

As Proexport's study (2012) has shown, there is a nascent video game industry in Colombia. Further research should be done to other national video game firms in order to verify if they all fit in with the International New Ventures framework characteristics and behaviors.

7. Managerial implications and public policy

Governments and game studios in Latin American countries as well as in other emerging regions can apply the following lessons.

Governments play a very important role in the evolution of the video game industry and digital content in general (Cutler & Company, 2002).

Thanks to the support of Proexport and MinTIC, the company has been able to expand their network, learn new skills and raise their international credibility.

Game developers have high production costs while they develop their games and there is a high risk of not getting their return on investment (Cutler & Company, 2002). There is need for more national angel investors and venture capitals interested and educated in the video game industry, especially in emerging markets.

Scaling game projects is difficult, acquiring talent and project management prove to be big challenges for small game companies (Cutler & Company, 2002). Small game companies in Colombia are only starting to get involved in bigger projects or simultaneous projects. Entrepreneurial teams will need to be careful on how they approach these situations.

An important factor for creating a sense of industry community is the creation and growth of industry based support institutions (Cutler & Company, 2002). The Colombian Chapter of the IGDA has done a good job in achieving this goal. The collaboration of the government with the institution has been key in the fostering of the national game development ecosystem.

6. Discussion

The main characteristics found in the company analyzed in the case study were a rapid internationalization process due to an international view of the market, few resources, pre-natal stage operation, outsourcing key personnel, the creation of networks to improve the detection of opportunities and the formation of hybrid structures in order to attain knowledge and balance their shortcomings.

Previous research from Cunningham, Loane and Ibbotson (2012) came to similar conclusions with small video game studios from Poland and Hungary. The company in the present case study has very similar behavior than what the authors found in the game companies they analyzed. The only difference in these findings compared to C2 Game Studio is that both of the founders of this company did have previous international experience, one of them on the video game industry. The case also fits in well with the findings from Varma (2011), where Indian born global IT companies are led by people with previous networks as well as international and technological experience that allow them to take advantage of new international opportunities.

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8. Conclusion

The objective of this paper was to detail and provide a conceptual and theoretical interpretation of the internationalization process of a video game company in an emerging country located in Latin America. This paper first explored the case of C2 Game Studio through an ethnographic study. It described the turning point of the company where it pivoted to become an international game development studio. It found the entrepreneurial team sought high return opportunities in a global market. The study also showed the company to use hybrid structures in order to gain knowledge and resources, thus highlighting the importance of publishers in the industry. It also showed C2 Game Studio to be one of the leading game companies in the country and exposed a nascent industry in Colombia with firms that present similar characteristics and behaviors.

On the second part of the paper, the case was analyzed through different international business theoretical frameworks and found that International New Ventures were the best fit to understanding the internationalization process and behavior of the company. Future research could explore the impact of the ecosystem on the internationalization process of video game companies in Colombia. Since this was a single case study, there is clearly a need to do further research with a larger number of companies from the country and the region.

This research should provide some insights to stakeholders such as the government, academia and other institutions to help them understand the internationalization process of video game studios. This understanding will help stakeholders from other emerging countries to better support such companies, and to academics to advance existing theoretical frameworks.

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Endnotes

¹ Digital content industry promotion policy. v2.0

² Innpulsa Colombia is a national government unit created to promote entrepreneurial innovation.

³ Route N.

⁴ Colombian Chapter of the International Game Developers Association

⁵ "Steel Pencil Award". Colombian Design Award.

⁶ Proexport is the Colombian government agency in charge of promoting non-conventional exports.

⁷ National Offer Of The Digital Content Industry.