The Born Global phenomenon in Mexico:  
A Bright start for technology intensive start-ups

Silvia Lozano1*, Professor Robert E. Morgan2, Mathew Robson3  
1PhDc, Cardiff University,  
Dirección de Posgrado e Investigación, Universidad La Salle  
E-mail: LozanoS@cardiff.ac.uk  
2Associate Dean (External Relations) and  
Sir Julian Hodge Chair in Marketing & Strategy  
E-mail: morganre@cardiff.ac.uk  
3Senior Lecturer in International Management and Marketing  
2, 3Cardiff Business School, Cardiff University  
E-mail:RobsonMJ@Cardiff.ac.uk


RESUMEN

Un número cada vez mayor de empresas en el mundo no ha seguido el proceso tradicional de internacionalización, en tanto que cruzan sus fronteras nacionales desde una edad muy temprana, cuestionando el concepto gradualista para acercarse a mercados extranjeros. El rápido crecimiento del fenómeno de las empresas nacidas globales también se encuentra en México. Como una de las economías más abiertas del mundo, México ha creado una adecuada constelación abrillantadora de iniciadores tecnológicos intensivos.

Palabras clave: Empresas nacidas globales, iniciadores tecnológicos intensivos, iniciadores globales.

ABSTRACT

An increasing number of firms worldwide have not been following the traditional internationalization process as they cross their national borders from a very young age, questioning the gradualist concept to approach foreign markets. The rapid growth of the born global firm's phenomenon is also founded in Mexico. As one of the most open economies in the world, Mexico has created an adequate nebula brighten up technology intensive start-ups.

Key Words: Born global firms, technology intensive start-ups, global start-ups

INTRODUCTION

TRALCOM is a Mexican leading company in E-Learning based solutions targeting both the academic and corporate markets. With over 378,000 licenses sold in Mexico and in

1 We gratefully acknowledge the great value of the suggestions from Javier Fernández Arrachea, Director of International Business and Entrepreneurs of NAFINSA. (NAFINSA is Mexico's development bank for SMEs). Thanks are also due to the insightful comments of Alex de Kerpel, Commercial Attaché of BANCOMEXT, Netherlands. (BANCOMEXT is a development bank in charge of encouraging Mexican international trade). And above all our warmest thanks to the invaluable support and advice of Dr. A. Luna, Chancellor of Universidad La Salle, Mexico City.
foreign countries, the company became a worldwide E-Learning Content Carrier, providing academic and corporate communities with a continuous learning environment and supplying content providers with the experience and services necessary to convert or transport their content into those communities. With its unique business model, this firm categorized as small and medium enterprise (SME), allows organizations to establish their own E-learning portals without worrying about the investment risk, and allows content providers to bring their offers into TRALCOM’s communities. Recently established, in the year 2000, this young small firm was focused on international markets from inception, attracted by the bright lights of the major leagues of competition from the beginning.

By targeting the market of large and small corporations, governments and educational entities, TRALCOM is based in the need of the customers to modernize and remain competitive in their market. This is the reason why this firm includes extramural services via the Internet/Intranet in order to guarantee a modern mean of learning and communicating for its customers, such as global financial institutions, international pharmaceutical firms, local and foreign universities. After becoming the leader in E-Learning solutions new related services have been developed by TRALCOM, such as E-Meeting by offering a more organized work scheme eliminating geographical boundaries. Additionally E-Consulting service based on tools that facilitate contact between consultants and customer in less time. Finally, Content Development service focused on offering pedagogic consulting, instructional design, digital recording and video streaming technology with Digital Rights Management in order to protect the customers’ intellectual property.

TRALCOM represents a new growing phenomenon of technology-intensive start-ups that think and act global from a very young age, describing one more example of new venture start-ups that are breaking the conventional paradigm of internationalization.

Traditionally the internationalization process of the firms has been conceived as a gradual process with incremental stages during a long period of time [1]. However, during the last ten years, an increasing number of firms have followed the tendency to get involved in international markets, from their creation, questioning the gradualist conception of internationalization. These firms do not follow the traditional incremental and gradual international expansion pattern, and some of them are born with a world perspective being characterized by an instant internationalization.

As noted by Luostarinen and Gabrielsson [2], such companies, have been termed Born Globals [2-10], Global start-ups [11], High technology Start-ups [12] and International New Ventures. [13,14] Born Global firms aim at the global market right from inception [8] and start their globalization immediately without any preceding domestic operations, or simultaneously with domestic business, or exceptionally soon after domestic operations. [5]

While different authors have treated the born global firms as synonymous with international new ventures and global start-ups, authors such as Knight and Cavusgil [15] make a distinction in terms of the age of the firm at exporting, identifying more than 1,000 Born Globals in the United States that were crossing national borders within three years of founded. This parameter is being supported by other studies that indicate similar findings. [7,9,16,17]

Both popular business press and academic research carried out independently around the world believe that the phenomenon of Born Global firms is important. [14] The formation of Born Global firms has been identified in more than 10 countries in all parts of the world. [13,14] The fact the Born Global firms seem to be a worldwide phenomenon suggests that the process is not unique to a firm or country. [18] In Canada, an empirical study of 75 early stage technology-based firms found that 93 percent of the companies
had foreign sales shortly after establishment. [19] In Norway and France, an empirical study of small firms found that more than half of exporting firms established since 1990 could be classified as Born Globals. [20] In Australia, a McKinsey study found that 20 percent of new trade growth is raised from Born Global SMEs. [9]

The impact of technological, social and economic changes propels firms into international markets soon after the firms’ inception.[21] Born Global firms are primarily in technology-intensive business, and some others are found in a variety of industries.[3,13] The importance of new technology-based firms is evident as can be seen through the cases of Finland. During the economic recession of the early 1990s, new technology-based firms in Finland increased in number faster than firms in low-technology industrial sectors. New technology based firms also had a role in technology transfer between the research sphere and industry, between and within different industry clusters, and in adapting advance technology to the needs of traditional firms. [22]

Although small numbers of Born Global firms have existed for centuries, their increasing occurrence and importance in global markets indicates a need for greater understanding of the phenomenon. [13] Many Born Globals have been successfully competing against larger established players, and manage profitable, fast growing business systems in a way that was impossible twenty or even ten years ago. [9]

It is expected that the phenomenon of Born Globals will become more widespread in the future. [7] As Born Globals are increasing in numbers, their importance in terms of innovation, employment and economic growth is also ascending, combined with the challenges facing Born Globals’ managers and the limitations of existing theory, makes the Born Global field an interesting area of research. [20]

Given the importance of the Born Global phenomenon worldwide, this study is based in the technology-intensive Born Global Mexican firms, with two years of age by the time they started exporting. In Mexico, as in other countries of Latin America such as Argentina and Brazil, the rapid growth in high-tech manufacturing occurred as these countries opened their economies to trade and foreign investment; they even privatized their state-owned enterprises to spur economic growth. [23]

In this conceptual paper we begin by an understanding of the international market environment changes in Mexico that formed an adequate space triggering Born Global firms. Next, we integrate insights of established theory associated with the process of internationalization, the recent appearance of the Born Global phenomenon and international entrepreneurship. Furthermore we propose a model for high-tech intensive start ups after having completed qualitative fieldwork and literature based insights to specify relevant constructs. Finally we describe our research design and the data collection process in Mexico.

Creation of the adequate Arena in Mexico for Born Globals to Grow

In Mexico, there have been tremendous efforts to generate an economic open process and to diversify the export products looking to raise the participation of other industry sectors different from petroleum, identifying high technology as a vital sector.

The past two decades have seen dramatic changes in the Mexican economy. Appearing as a closed economy until mid 80s, after more than three decades of pursuing import substitution policies, Mexico embarked on a serious program of trade liberalization, which has led the country to become the thirteenth largest exporter and the tenth largest importer in the world. [24] Tariffs were reduced substantially, import licenses were gradually rescinded, and export promotion policies were pursued, particularly through the Maquiladoras sector. The advent of the General Agreement of Tariffs and Trade (GATT)
in 1986 initiated the economic opening process of the country, followed by several agreements from which is important to mention the North America Free Trade Agreement (NAFTA) that came into effect on January 1\textsuperscript{st}, 1994. Up to now, Mexico has negotiated a total of 12 free trade agreements with 43 countries from North America, Europe, Latin America and Asia. This net of agreements offers a preferential access to a market higher than 1.3 billion of consumers (see figure 1). The process of trade liberalization continues, and Mexico is an active participant on the current discussion regarding the formation of a Free Trade Area of the Americas (FTAA).

![Figure 1. Open Economic Process of Mexico](source)

The major purpose of the change in trade policy regime, in the wake of the debt crisis of the early 1980s, was to accelerate economic development and to “grow out” of debt. This remained the purpose of further trade liberalization programs. Great expectations were raised with the signing of NAFTA that somehow Mexico would embark on a “new golden age” of economic growth and prosperity. [25,26] It is also important to mention that different opinions have emerged regarding this argument. [27,28]

The net of agreements signed by Mexico has offered Mexican firms access to diversified markets and new prospects for long term economic growth. As Mexico has grown to become a considerable exporter, more importantly is to underline how the export economy has substantially diversified. In 1985, 70 percent of non-Maquiladora exports were classified as petroleum products. Ten years later, over 50 percent of non-Maquiladora exports were classified in groups as diverse as automotive and transport equipment, chemical products, iron and steel, electronic equipment and textiles. [29] The high-tech manufacturing grew substantially over the last decade in Mexico as the same did in Latin America, and has become an important source of economic growth. The combined production of seven Latin American countries –Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, and Venezuela– increased 93 percent between 1991 and 2000, rising from $27 to $52 billion US dollars. Within such a frame, high-tech manufacturing in Latin America has been dominated by Argentina, Brazil and Mexico accounting for over 90 percent of total high-tech production in 2000, [23] see figure 2.
High-Tech manufacturing has become more reliant on trade than any other manufacturing industry in Latin America. Over the decade of the nineties, high-tech trade expanded more than 460 percent, rising from $15.4 to $85.6 billion of U.S. dollars. Measured by trade intensity—the combined value of exports and imports as a share of production—the sector reflect an increment of more than 150 percent by the year 2000, compared to 62 percent in the entire manufacturing sector. [23] Through this extent it is important to remark that in the 90s Mexico shifted from net importer to net exporter of high-tech goods. [30]

Therefore, the strong forces that drive globalization worldwide have also reached Mexico and have triggered the need to create new flexible firms that could take advantage of this recent framework by integrating the access to international business in the high tech sector. Furthermore, the challenge to create Born Globals in Mexico has been of great magnitude regarding the nearly recent openness of the economy and the new high tech manufacture exporter position of the country.

Research Gap

While many authors have addressed the significance of SMEs as engines of growth, innovation and economic development [4], their international presence is also considerable. In particular, it is important to notice the increasing tendency in the number of Mexican SMEs exporters registered in the National Export List, ranged from more than 34 thousand in the year 2000 to 36.4 thousand SMEs five years later. From that total of Mexican SMEs exporters, the percentage of firms that sell more than 100 thousand US dollars have also increased, from 36.05 to 38.08 percent of SMEs in the same period. [31]

Although SMEs provide a substantial share of current employment and future growth prospects in many countries worldwide, [4,32-34] traditional literature on internationalization was developed primarily through research on large, mature, multinational manufacturing companies. [14,35,36] These traditional theories from the field of international business fail to explain the globalization process of Born Globals. Monopolistic advantage theory, product cycle theory, stage theories of internationalization, oligopolistic reaction theory and internalization theory assume that firms become international long after they have been formed. [13] Therefore, research related to the globalization process of Born Globals is still in its early stages. [3]

As the number of Born Globals has increased dramatically since the start of the 90s, more and more researchers have recognized the importance of this new phenomenon
and a new stream of Born Global studies has emerged. In this regard, Born Global research is still at an early stage and more research is needed as has been recognized by most researchers of the phenomenon,

“Though there is evidence that Born Global firms exist, little is known about the characteristics of these firms, their motives for exporting, their strategies, and the competitive advantages often found among these firms”. [20]

Research on the internationalization process has gone by hand with research on firm strategies, presenting the same path as being mainly focused on large MNC’s [35,37-39]. Based on theories of studies focused on large and mature MNCs, the term globalization has been used to describe the act of a MNC moving from a multinational strategy to a global strategy. Levitt [40] described the ultimate goal of globalization as the adoption of pure global strategies that are based on viewing the world as one whole market, for which standard products are created. Conversely Bartlett and Ghoshal [41] combined aspects of both local responsiveness and global efficiency. Moreover, Yip [39] espoused globalization as a three stage process of the core strategy going from developing, to internationalization and globalization.

For this reason, a research gap can be clearly identified. It involves the concern on the globalization process in technology intensive born global firms through the prism of the international entrepreneurship field [42], so that it could refract the main dimensions of strategic management, international marketing and entrepreneurship, from which it has been composed.

The research field of international entrepreneurship that analyzes the rise of Born Globals has been rapidly developed over the last years in European countries and North America. However, up to what is known, this is the first study focused on international tech-intensive start-ups in Mexico.

Our Research AND Key Learn Points

As previously analyzed, the literature highlights a research gap in strategic management, international marketing and entrepreneurship regarding Born Global firms. Hence, having identified the research gap a model for high-tech intensive start-ups is being proposed (see figure 3). It concerns explaining the interplay among the entrepreneurial orientation, [43-45] export market orientation [46], available resources and capabilities, competitive strategy decisions, explorative and exploitative innovation strategy [47] and competitive intensity turbulence of the export market [46,48-51] in order to determine the export venture positional advantages and performance outcome of the Born Globals. [49,52,53]

![Figure 3. Proposed Model for High-Tech Intensive Start Ups](image-url)
First this research integrates the theoretical model of Export Venture Performance [54] that includes the structure conduct performance paradigm [55-58] and the resource based view. [59,60] This model presents interplay between the resources and capabilities available to export ventures, competitive strategy decisions, and the competitive intensity of the export market served in determining export venture positional advantages and performance outcomes.

Subsequently, the entrepreneurial orientation [43-45] and export market orientation [48] as strategic orientation dimensions were incorporated to the research.

Moreover, as Cadogan and other authors [46] suggest that competitive intensity and technological turbulence are environmental aspects that may moderate performance of the export firms, this study provides new evidence in the Born Globals including the arguments of the author.

Finally, based on the argument that exploration and exploitation represent two fundamental approaches required for firms to balance their performance embedding the concept of ambidextrous organizations [47], this study embrace both dimensions in order to test its influence on born global firm performance.

The data collection was conducted in Mexico and carried out in three stages. The fist stage consisted on the identification of Born Global firms in Mexico. After a deep review of relevant secondary data sources of SMEs exports' databases 700 high-tech born global firms were detected. In order to make a pilot test of the questionnaire, the next stage focused on approaching five high tech Born Global Mexican firms from a cross section of manufacturing industries, including computer and electronics; electric; machinery; chemical and transportation equipment. The method of investigation included analysis of multiple sources of evidence: (1) personal in depth interviews with founders and top management as the same as with international business development managers; (2) press articles; (3) press releases; (4) annual reports & marketing materials; (5) company Internet sites and other Internet sites databases. In addition to providing insights into the identification and measurement of dimensions that represent our theoretical constructs, the fieldwork interviews also provided important support for the face validity of our theoretical model. The final stage of the fieldwork was based on the application of the questionnaire using the sample of 700 high tech Born Global start-ups identified on the first stage of the data collection. We contacted each firm by telephone and after multiple interviews, 270 responses were produced.

CONCLUSIONS

As TRALCOM denotes a recent phenomenon of a young tech-intensive international start-up located in Mexico, more evidence is found regarding the creation of Born Globals worldwide and their growing importance in terms of innovation, employment and economic growth. This phenomenon is a response to the technological, social and economic changes faced in different parts of the globe. In this regard, the study of the born global firms is still in an early stage as traditional literature on internationalization was developed through research on large, mature and multinational companies that conceive competing abroad as a gradual incremental process during a long period of time. Therefore, the appearance of the born global phenomenon has triggered the need for a new paradigm of internationalization, and within it the interest for new models that explain the firm's strategy of these dynamic young participants of the world market from inception.

According to the literature reviewed, European and North American countries have been up to now the location for born global studies. Consequently, this is the first study focused on high-tech start-ups in Mexico, one of the most open countries in the world.
In Mexico the need to diversify exports facilitated the creation of an adequate arena for born global firms to grow. In the past two decades Mexico turned from a closed economy into the thirteenth largest exporter and the tenth importer in the world. This has raised the participation of other sectors different from petroleum in the balance of trade, including high-tech products generated by new flexible firms taking the advantage of this open framework.

In the absence of a general theory that explains the characteristics of these firms; their motives and strategies for exporting; competitive advantages and performance, our theoretical model provides a foundation for knowledge development in this increasingly important domain of international entrepreneurship.

Among the 700 high-tech global firms in Mexico, TRALCOM is one of the examples that represent a result of twenty years of country’s effort to lighten a proper environment that encourage exports, and within it brighten the start for technology intensive start ups.

Selected Websites for Resource Materials

The visit to this site provides information of TRALCOM.

<http://www.economia.gob.mx/>
This is the website of Mexico’s Ministry of Economy.

<http://www.inegi.gob.mx/>
This is the website of Mexico’s National Institute for Statistics, Geography, and Computing

<http://www.bancomext.com/Bancomext/index.jsp>
This is the website of Mexico’s Development bank in charge of encouraging Mexican international trade.

<http://www.nafin.com/portalnf/>
This is the website of Mexico’s Development bank that supports SMEs

REFERENCES


