FUNDAÇÃO GETÚLIO VARGAS ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

JULIETTE ANNE RAULT

THE INFLUENCE OF URBAN STRUCTURES ON ENTREPRENEURIAL DECISION-MAKING:
A COMPARATIVE ANALYSIS OF MEXICO CITY AND SÃO PAULO

SÃO PAULO

2013

FUNDAÇÃO GETÚLIO VARGAS ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

JULIETTE ANNE RAULT

THE INFLUENCE OF URBAN STRUCTURES ON ENTREPRENEURIAL DECISION-MAKING: A COMPARATIVE ANALYSIS OF MEXICO CITY AND SÃO PAULO

Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento: GESTÃO E COMPETITIVIDADE EM EMPRESAS GLOBAIS

Orientador Prof. Dr. GILBERTO SARFATI

SÃO PAULO

2013

Rault, Juliette Anne.

The Influence of Urban Structures on Entrepreneurial Decision-Making: A Comparative Analysis on Mexico City and Sao Paulo / Rault, Juliette Anne, 2013

105 pages

Orientador: Gilberto Sarfati

Dissertação (MPGI) - Escola de Administração de Empresas de São Paulo.

Empreendedorismo - São Paulo (SP).
 Empreendedorismo - Cidade do México (México).
 Economia urbana.
 Capital de risco.
 Concentração urbana.
 Processo decisório.
 Sarfati, Gilberto.
 Dissertação (MPGI) - Escola de Administração de Empresas de São Paulo.
 Título.

CDU 658.011.49

JULIETTE ANNE RAULT

THE INFLUENCE OF URBAN STRUCTURES ON ENTREPRENEURIAL DECISION-MAKING: A COMPARATIVE ANALYSIS OF MEXICO CITY AND SÃO PAULO

Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento: GESTÃO E COMPETITIVIDADE EM EMPRESAS GLOBAIS

Data de Aprovação:
/·
Banca Examinadora:
Prof. Dr. GILBERTO SARFATI
Prof. Dr. TALES ANDREASSI

Prof. Dr. MARCOS HASHIMOTO

This research would not have been possible without the participation and enthusiasm of the entrepreneurs that I met and interviewed in both countries: Jorge Soto (Citivox), Cristina Palacios Goddard (Aventones), Victor Hugo Celaya (Arto) and Julio Salazar (Cirklo) in Mexico City and Renann Fortes (Payleven), Bruno Massote (TerraCycle) and Felipe Fioravante (ifood) in Sao Paulo.

I would also like to thank Roberto Charvel (Vander Capital Partners), Cesar Salazar (Mexican VC) and Rodrigo Baer (Warehouse Investimentos) for their valuable time and advice that proved to be crucial for this research. I thank Amisha Miller and Luiz Guilherme Manzano (Endeavor Brasil), Alonso Navarro (Endeavor Mexico) and the general director of Endeavor Mexico, Pilar Aguilar and Ismaël Bermudez (Angel Ventures Mexico) for helping me understand the entrepreneurial activity in both cities.

Then, I would like to thank my advisor, Gilberto Sarfati (FGV-EAESP) for the confidence and support he has shown towards me, my research subject, and also for the guidance he has provided through the entire process.

I further thank Katharina for the inspiring times spent in Sao Paulo and the insightful remarks on this thesis, Marie for generously sharing her wisdom as a researcher, Alipio for providing his native Brazilian perspective and Kenneth for his endless support and my parents for enabling me to pursue these wonderful opportunities.

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody."

Jane Jacobs, The Death and Life of Great American Cities, 1961

RESUMO

Promover a atividade empreendedora é hoje mais do que nunca uma prioridade para as economias em desenvolvimento. Em diferentes partes do mundo, empreendedores têm sido reconhecidos como verdadeiros agentes de transformação, e as novas empresas que eles criam tornam-se condutoras de inovação, que ao final pode ser difundida ao resto da economia. Teorias de economia urbana, que analisam a dinâmica da relação entre aglomeração urbana e atividade econômica, enfatizam a importância da concentração espacial das indústrias num mesmo setor industrial. Entender os incentivos que dão início à atividade empreendedora é algo novo e o foco desses estudos tem sido principalmente em alguns poucos casos de economias industrializadas. Não obstante, o sucesso de um punhado de clusters de alta tecnologia, como o Vale do Silício, por exemplo, na Califórnia, Estados Unidos, não pode ser replicado, e as condições locais devem ser consideradas a fim de entender a surgimento desses ecossistemas. Este estudo pretende investigar os critérios em que os empreendedores fundamentam suas decisões quando selecionam as localizações do seu negócio. Especificamente, a pesquisa explora o recente movimento dos ecossistemas de empreendedores na Cidade do México e em São Paulo, as duas maiores áreas metropolitanas da América Latina, à luz das teorias de economia urbana. A fim de chegar aos resultados, a pesquisa segue o método baseado sobre uma análise comparativa de estudo de casos em dois bairros: Vila Leopoldina em São Paulo e a Colônia Roma Norte na Cidade do México. Os resultados consolidados baseados em entrevistas qualitativas realizadas nos dois bairros revelam que o lugar/sitio urbano, definido em termos de laços locais assim como da atmosfera geral do ambiente, continua sendo importante para os atores apesar das comunicações de alta velocidade que produzem mais interações entre as regiões do mundo. Além disso, a relação entre o empreendedor e o seu entorno é altamente dependente do estágio de desenvolvimento e da natureza da atividade da empresa; redes informais revelam-se essenciais para identificar as oportunidades de negócio antes de serem progressivamente substituídas por relações instituídas com fundos de capital de risco ou incubadoras. Estes dois ecossistemas nascentes geram suas próprias características, o que já pode sugerir suas futuras evoluções.

Palavras-chave: empreendedores, lugar, ecossistema, economia urbana, concentração espacial, fundo de capital risco, rede.

ABSTRACT

Encouraging entrepreneurial activity is now more than ever a priority of emerging economies. In different parts of the world, entrepreneurs are recognized as true agents of change, and the new enterprises they create become drivers of innovation, which can ultimately be diffused to the rest of the economy. Urban economic theories, which examine the dynamics between urban agglomeration and economic activity, have stressed the importance of spatial concentration of similar industries. Understanding the incentives that ignite entrepreneurial activity is fairly recent and has primarily focused on few cases in industrialized economies. Nevertheless, the success of a handful of high-tech clusters such as the Silicon Valley in California, USA, cannot be replicated in itself, and the local conditions have to be considered in order to understand the emergence of these ecosystems. This study intends to investigate the criteria in which entrepreneurs base their decisions when selecting the localization of their venture. More specifically, the research explores the recent emergence of entrepreneurial ecosystems in Mexico City and Sao Paulo, the two largest Latin American metropolitan areas, in the light of a retrospective on urban economics. In order to do so, the research follows the method of a comparative case study based on the exploration of two neighborhoods: Vila Leopoldina in Sao Paulo and the Colonia Roma Norte in Mexico City. The consolidated results based on the qualitative interviews carried out in both neighborhoods first reveal that the urban place, defined as the local ties as well as the general atmosphere of the environment, remains important for the actors despite the increasing use of high speed communications that generate more interactivity within regions. Furthermore, the relation between the entrepreneurs and their local environment is highly dependent on the stage of development and the nature of the activity of their ventures; informal networks prove to be instrumental in identifying the business opportunities before progressively being replaced through institutionalized relations with Venture Capital firms or incubators. These two nascent ecosystems are nurturing specific features of their own, which can begin to outline their future evolution.

Key words: entrepreneurs, place, ecosystems, urban economics, spatial concentration, venture capital, network

TABLE OF FIGURES AND TABLES

Figure 1: Innovation, a driver of the economic growth	18
Figure 2: Geographic concentration of cultural activity (in terms of jobs) with the epicente	ers
of information and communication technology (in terms of job creation)	29
Figure 3: Administrative maps of Mexico City and Sao Paulo and the studied neighborhood	ods .
	46
Figure 4: Demographic growth by neighborhood in Mexico City (1970-1995): The	
disaffection of the center	51
Figure 5: The combination of sources that supports the facts	55
Figure 6: The ecosystem of the Colonia Roma, Mexico City (situation in November 2012)	59
Figure 7: The ecosystem of Vila Leopoldina, Sao Paulo (situation in November 2012)	60
Figure 8: Representation of the Colonia Roma Norte's main urban amenities	62
Figure 9: Representation of Vila Leopoldina's main urban amenities	70
Figure 10: Schematization of both ecosystems	81
Table 1: Brazil and Mexico at the top-three countries in terms of early-stage entrepreneuriactivity	
Table 2: Average years of investment perspective per category of financial institution	
Table 3: Comparison between research methods: Case study and survey	
Table 4: Summary of results (based on interviews)	
Table 5: Average rental prices for offices in Sao Paulo, by neighborhood	65
Table 6: Average rental prices for offices in Mexico City, by neighborhood	65
Picture 1: The <i>verticalization</i> of Vila Leopoldina	45
Picture 2: Roma Norte and its various recreational activities	50
Picture 3: Public transportation in Roma Norte, Mexico City	51
Picture 4: The wall separated the corporate offices from a <i>favela</i> (Vila Leopoldina)	63
Roy 1: Notes on the business incubator	36

TABLE OF ABBREVIATIONS AND ACRONYMS

IDB Inter-American Development Bank

GEM Global Entrepreneurship Monitor

TEA Total-Early Stage Entrepreneurial Activity

OECD Organization for Economic Co-operation and Development

IFC Inter-Firm Cooperation

GDP Gross Domestic Product

MAR Model Marshall Arrow Romer Model

NYC New York City

HBS Harvard Business School

NTBF New Technology-based Firms

VC Venture Capital

BAs Business Angels

PE Private Equity

DNVCA Data National Venture Capital Association

FDI Foreign Direct Investment

Mexico DF Mexico Districto Federal

ZIR Zona industrial em Reestruturação

CEAGESP Companhia de Entrepostos e Armazens Gerais de Sao Paulo

CPTM Companhia Paulista de Trens Metropolitanos

MIT Massachusetts Institute of Technology

USA United States of America

TABLE OF CONTENTS

1. Introduction	14
2. Context and definitions: Entrepreneurs and their ecosystem, an overview of two	
emerging economies	17
2.1 Entrepreneurship as a multi-layered concept	17
2.1.1 The entrepreneur as an agent of change and pivot of innovation	18
2.1.2 Entrepreneurship: An embedded concept	19
2.1.3 The knowledge-based economy	20
2.2 Characteristics of entrepreneurial ventures in emerging countries: Overview of two)
Latin American countries, Brazil and Mexico	21
2.2.1 Entrepreneurial trend in Brazil and Mexico	21
2.2.2 Entrepreneurs ventures in Brazil and Mexico: Opportunities and obstacles	22
3. Conceptual issues : Entrepreneurial ventures in spatial context	24
3.1 Why do cities attract entrepreneurs?	24
3.1.1 A phenomenon of business concentration: The cluster	24
3.1.1.1 Human agency and the pursuit of productive opportunity	26
3.1.2 Cities as natural place for innovation	26
3.1.3 The diversified urban areas as <i>nursery</i> for future firms	27
3.2 The utilitarian value of place	30
3.2.1 Resource-based input	30
3.2.1.1 Human capital and knowledge spillovers	31
3.2.1.2 Financial capital	32
3.2.2 Networks and the importance of entrepreneurial culture	34
3.2.3 The entrepreneurs' private decision-making towards non-monetary interests.	37
3.3 Is the localization decision a rational process?	38
3.4 The relevance of place in the decision process or the death of distance	39
4. Methodology	40
4.1 The case study approach	41
4.1.1 Multiple case study	42
4.1.2 Methodological justification of the multiple case study approach	42
4.2 Sample: Comparative approach in Mexico City and Sao Paulo	44
4.2.1 Featuring two global cities: Mexico City and Sao Paulo	44

	4.2.2 Neighborhoods in rehabilitation: Vila Leopoldina (Sao Paulo) and Colonia F	toma
	(Mexico City)	46
	4.2.2.1 Vila Leopoldina: The revitalization through its deindustrialization	46
	4.2.2.2 The Colonia Roma: An artist neighborhood in gentrification	47
	4.3 Research method design and data collection	53
	4.3.1 Search and selection of entrepreneurs	54
	4.4 Criteria for interpretation of findings	56
	4.4.1 Determinants leading to findings	57
5.	. Results	58
	5.1 Analysis of the pool of entrepreneurs and their working environment	59
	5.1.1 Entrepreneurs' profiles	59
	5.1.2 Organization and interactions within each ecosystem	60
	5.2 The principal factors of decision	61
	5.2.1 The accessibility of the office place through public transportation: A priority .	62
	5.2.2 The issue of security	62
	5.2.3. Rationalizing the costs: Are they irrelevant?	64
	5.2.4 Attracting highly-qualified human capital	65
	5.2.5 The proximity to financial capital	66
	5.2.6 The network and informal contacts	66
	5.3 The symbolic value of place	71
	5.3.1 The lasting relevance of territorial dimension	71
	5.3.2 A contrasted discourse: Choice versus opportunity	72
	5.3.3 Finding inspiration within the neighborhood and its reputational value	73
6.	Discussion of findings	76
	6.1 Entrepreneurs' relations to the neighborhood and its urban structures in conjun	ction
	with the business needs	76
	6.1.1 The importance of the neighborhood according to the firm's stage of develop	nent
		76
	6.1.2 The importance of the neighborhood according to the firm's activity and statu	.S
		77
	6.2 The sense of community among entrepreneurs : A catalyst for an expanding ecosys	stem
		77
	6.2.1 "Roma Valley," a spontaneous phenomenon	78
	6.2.2 Intertwined private and working life	79

	6.3 Two distinct models of ecosystem	81
7.	Conclusion	83
8.	References	87
9.	Annexes	97
	9.1 Interview questions for the entrepreneurs	97
	9.2 The entrepreneurs' office layout, Sao Paulo	99
	9.3 The entrepreneurs' office layout, Mexico City	100
	9.4 Profile of the Mexican entrepreneurs and their responses to questions	103
	9.5 Profile of the Brazilian entrepreneurs and their responses to questions	108

1. <u>Introduction</u>

The field of entrepreneurship is progressively garnering a wider and more diverse audience, whether it involves researchers or practitioners of the business world. Some research has demonstrated that economic growth is positively correlated with the capacity of entrepreneurs to identify and exploit opportunities, and further diffuse innovation (OECD, 2004). Entrepreneurs have been classified as *agents of change* for their economies (Audretsch & Keilbach, 2002). Their economic impact can be perceived at two levels: It is transnational in terms of generating new jobs and creating extra output for the economy of a country, and it is also local by reinvigorating the activities of a region. The rise of clusters of companies within a same geographic area has given birth to an extensive literature (Porter, 1990; Saxenian, 1994; Markusen, 1996) on the advantages of certain locations and the subsequent phenomenon of value creation. However, the recurrent buzzwords revolving around entrepreneurship (i.e. incubators, crowdfunding, venture capital firms, high-tech) fail to provide a comprehensive picture of the mechanics behind this phenomenon.

The *entrepreneurial ecosystem* has emerged as a general concept in order to embrace the plurality of actors, of policies, of programs along with the culture that altogether foster a climate for entrepreneurship (Babson Institute). The most lauded and mature ecosystem around the world is the Silicon Valley in California (USA): The region's reputation is hinged on a solid track record of successful technology firms and ongoing cycles of innovation since the end of the 1950s (Quigley, 2002). According to a report published by *Startup Genome* and *Telefonica Digital*, a staggering number of new ecosystems including Tel Aviv, Los Angeles, New York, Boston, London, and Sao Paulo are blossoming around the world and entrepreneurs are taking advantage of a more favorable environment that did not exist ten or five years ago (Report, 2012).

Brazil and Mexico, emerging economies of Latin America, are regularly compared to one another due to their large domestic market and solid future growth potential. This "rivalry" has taken a new turn this year as some analysts predicted that by 2020, Mexico will be among the ten largest economies in the world (The Economist, 2012) and could potentially overtake Brazil as the emerging power of Latin America (Nomura, 2012). Both Latin American countries (along with others such as Chile) are nurturing dynamic entrepreneurial environments through technological clusters, incubators and academic incentive programs.

The first intention of this thesis is to shed light on the specificities of the entrepreneurial ecosystems in Sao Paulo and Mexico City, both gigantic cities of emerging economies. Specifically, the research focuses on the initial phase of development to explore the following questions: *Under which conditions do these ecosystems spawn productive activities in these cities? How do entrepreneurs choose and evaluate their working environment?* The answers to these questions have consequences on the economic growth and thereafter the diffusion of innovation in these economies.

This present research explores the decision of *knowledge-based* entrepreneurs to favor certain locations to initiate their business ventures. Knowledge entrepreneurship is defined as "the ability to recognize knowledge acquired through organizational learning as valuable, and then to adopt innovative behavior in order to realize that value" (Mc Donald, 2002).

A second objective of the present study seeks to understand whether the spatial concentration of entrepreneurs results from spontaneous clustering or if entrepreneurs consciously pursue geographic proximity (and if they value inter-firm cooperation) so as to further organizational learning, spur innovation, or acquire knowledge, for example. This study intends to examine the meaningful resources for an entrepreneur's business venture as well as the meaning of the urban setting as a potential source of inspiration for entrepreneurs. As a matter of fact, a significant body of research has begun to refer to the entrepreneur as an *embedded* (notion coined by Granovetter, 1985) agent who is deeply influenced by his or her environment and where socio-economic factors are instrumental in shaping the process of business creation. The exemplary question: "Would Ford have achieved the same success if he had worked in Houston?" (Glaeser, 2010) helps to clarify the relationship at stake between the entrepreneur and his or her local environment.

The theoretical framework for this study is provided by a retrospective on theories of urban economics. The inherent amenities, resources and available networks make urban centers natural hotbeds for entrepreneurship. In fact, cities are prime sources of economic growth as the diversity of activities encourages *cross-fertilization* (Jacobs, 1969), which is a primary indicator of innovation. In order to provide answers to the questions at hand, this study follows the method of the case study (Yin, 2008). The neighborhood is the selected unit of analysis—the neighborhood as an ensemble of urban activities within administrative geographic limit. The research was conducted in Colonia Roma Norte in Mexico City and

_

¹Henry Ford based his company in Detroit, Michigan

Vila Leopoldina in Sao Paulo, two neighborhoods that are undergoing significant transformations within two fast-growing cities of the Latin American continent. Through qualitative interviews of entrepreneurs and field observation, the research intends to unravel the specific characteristics of the ecosystems in these cities and renew the traditional perspective of the issue at stake.

By examining the entrepreneurial ecosystems of two emerging economies, the present study is in a unique position of exploring geographic areas that remain under-studied relative to the questions the study poses. First, the results prove that dynamic hubs of entrepreneurs exist in these cities, and second, that the new generation of entrepreneurs is re-inventing its relationship to the local environment.

The comparison of two Latin American ecosystems provides the opportunity to share best practices and delineate the aspirations and the sources of inspiration of the young entrepreneurs in Mexico and Brazil. The analysis of the emerging entrepreneurial scene in these neighborhoods can also be of interest for investors and stakeholders of Sao Paulo and Mexico City. Furthermore, it can provide some insights to guide future public policies in order for them to target the concrete needs of the entrepreneurs in order to ignite the most systematic types of business creation.

The research is structured as follows: Section 2 defines the actors and the terms of the debate, delimiting the boundaries of this research. The conceptual issues are considered in Section 3 in which is described, the interdisciplinary approach of urban studies and urban economics. Section 4, the methodology presents the essential tools in order to analyze both samples. Lastly, Section 5 details the results of the field research and of the interviews carried in both cities, and precedes the main findings outlined in Section 6. The conclusion discusses the possible limitations and further recommendations from this research.

2. <u>Context and definition</u>: Entrepreneurs and their ecosystem, an overview of two emerging economies

A dynamic field of academic research on entrepreneurship consists of apprehending and explaining the origin of firm creation in certain areas and how to replicate the success in other parts of the world. In 1980, a Harvard Business Review article claimed that entrepreneurship had come to be *in vogue*: "If only our nation's businesses could become more entrepreneurial, the thinking goes, we would improve our productivity and compete more effectively in the world market place [...] but what does entrepreneurial mean?" (De Bruin & Dupuis, 2003).

Latin American economies are experiencing intense growth of entrepreneurial activity, and federal governments have endorsed the necessity of a business-friendly environment in order to galvanize innovation. Mexico and Brazil are often compared to one another in order to determine which Latin economy will be "country of the future" (The Economist, 2012). The potential of entrepreneurship is observed most acutely in both Brazil and Mexico "where there are large middle classes and growing disposable income" (Fernando Fabre, 2012). Alongside the developed economies, Mexico, Brazil and Chile have shown exuberant willingness to establish entrepreneurial hubs and facilitate the creation of new businesses. Having considered the role of entrepreneurship in generating more output for the economy, a definition of this notion as well as the emergence of the ecosystem will be examined. Finally, a brief overview of the entrepreneurial situation in Brazil and Mexico will be provided.

2.1 Entrepreneurship as a multi-layered concept

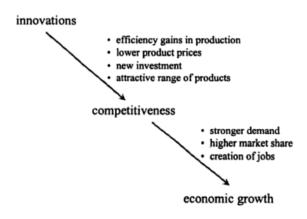
The generic and common definition considered for entrepreneurship is "the capacity to create and develop new business ventures", the entrepreneur being the one who founds an enterprise (Jennings, 1993). Although this definition is often used for its simplicity, the extensive literature on entrepreneurship has introduced other criteria that will be essential for this study, specifically the notion of *embeddedness* (Granovetter, 1985).

2.1.1 The entrepreneur as the agent of change and pivot of innovation

Apart from a pioneering work carried by J. Schumpeter, the early economic studies of neoclassical inspiration dismissed the individual entrepreneur from their analytic framework. The internal functioning of firms is called "the black box" and the post- Second World War economic tradition centered its focus on large-scale companies capable of driving consumers' preferences and increasing productivity rates. Up until the 1980s, the convention held that, "the large enterprise is the dominant form of business organization" (Wider UNU report). The mere *process* of firm creation, therefore, was largely left aside².

Since Robert Solow (1957), innovation has been perceived as a factor of production—on the same level as labor and capital— which contributes to the long-term development of economies. Innovation fuels competitiveness mainly through the increase of productivity that it generates and in the end, stimulates economic growth. The competitive advantage created by the emergence of new dynamic firms lies in its relation to innovation. Following the Schumpeterian concept, the entrepreneur is not only a business creator but also an innovator, an agent of change and innovation is the "process that includes turning the products of our brainpower into actual new products on the market" (Kauffman thoughtbook, 2011)

Figure 1: Innovation, a driver of economic growth



Source: Own illustration, inspired by McKinsey Global Institute (2002: 12).

Source: M. Balzat, An Economic Analysis of Innovation: Extending the Concept of National Innovation Systems

Thus, the progressive importance given to innovation as a main driver of economic growth instigated new studies that tried to explain why people would create new firms and who were

² Taylorism, Fordism and Keynesianism are dominant in economic theory and can be applied to large companies. They were hierarchical and bureaucratic organizations that were in the business of making long runs of standardized products. They introduced new and improved varieties with predictable regularity; they provided workers with life-time employment; and enjoyed fairly good relations with the giant trade unions (The Economist, 2001).

those who created them. It gave birth to the *trait approach- or personality-based analyses*-(McClellan, 1961) according to which some individuals display innate traits fostering entrepreneurial ventures. For Gilder (1984), entrepreneurs are businessmen who "are capable of learning, and who pursue their goals despite failures and frustrations". Seen as rational agents, entrepreneurs are risk-takers who balance their decision to start a new business according to two factors: dependence and self-employment (Rees and Shad, 1982). They are characterized by their optimism and need for autonomy (Delmar, 2000) or their propensity to take risks. Long (1983) highlights three main characteristics of the entrepreneur: He withstands and embraces uncertainty and risk; he uses his knowledge and experience to decide on location, structure and use of good resources; and he displays creative opportunism. A second body of research has also attempted to include resource availability and institutional structures to the analyses of firm creation.

2.1.2 Entrepreneurship as an embedded concept

Integrating the entrepreneur-innovator into a complex economic and social framework has led to the conceptualization of entrepreneurship as an "entrepreneurial event" (Shapero, 1994) and a "continuum of activities" (De Bruin & Dupuis, 2003). Through this approach, the creation of firms is not only analyzed through the lens of their creator but as a process delimited by different critical stages. For example, such an approach to entrepreneurship emphasizes two related processes: The discovery of entrepreneurial opportunities and the exploitation of such opportunities (Shane & Venkataraman, 2000; Hitt et al., 2001). Acknowledging the existence of lucrative opportunities as a pre-requisite to entrepreneurial ventures allows the possibility to also examine entrepreneurship in relation to its context and not exclusively to the enterprising individual's personality. Thus, variables such as socioeconomic factors can be considered as part of the decision-process. S. Shane & S. Venkataraman succinctly describe how the process can be broken down:

The field evolves into "the study of sources of opportunities; the process of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them"

The division of the entrepreneurial venture into stages has allowed to "demystify" the creation process and to move away from the idea of the "heroic" entrepreneur (CIETEC, 2002). Radically departing from the neoclassical assumption of *homo-economicus* as an atomistic agent that searches to promote self-interest and maximize profit, the concept of *embeddedness*

aims at demonstrating that entrepreneurs are deeply integrated within their local environment³. *Embeddedness* is defined as "the nature, depth and extent of an individual's ties into the environment" (Jack & Anderson, 2002) whether it is the entrepreneur's social group or network, his or her localization, or the local information available. Through the notion of *embeddedness*, M. Granovetter (1985) creates a bridge between economic performance and social structures. Economic behavior and potential opportunities derive from the firm's ties to its social and network structures (Uzzi, 1996).

The discussions revolving around the drivers of firm creation have contributed to highlight both the role of the entrepreneur - "the new pioneer" (Petzinger, 1999) - and its *milieu* as an ecosystem of available resources that will be evaluated by the entrepreneur as a favorable environment for entrepreneurial ventures.

_

³ The notion of *embeddedness* was introduced by the historian Karl Polanyi in attempts of comparing the pre-market societies with the market societies. The economic activity is strongly *embedded* in social relations in pre-market societies and in that respect, they differ from modern market societies where social relations are characterized by individual gains and calculations. (De Bruin and Dupuis, 2003)

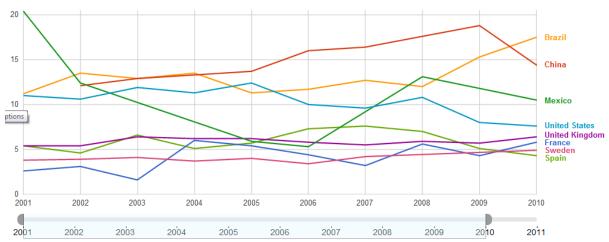
2.2 Characteristics of entrepreneurial ventures in emerging countries: Overview of two Latin American countries, Brazil and Mexico

Although entrepreneurship as an academic field has involved a plethora of research, the vast majority of this research has been based on observations made in developed countries. The lack of data measuring entrepreneurship is widely true for most countries, and even more so for emerging economies. Academic research about firm creation within emerging countries is still in its infancy, but it has already discerned some relevant patterns for Latin America.

2.2.1 Entrepreneurial trends in Brazil and Mexico

The information provided by GEM (Global Entrepreneurship Monitor) since 1999 has gathered annual data on entrepreneurial activity for more than 30 countries. Through their measurement tool labeled Total-Early Stage Entrepreneurial Activity (TEA), they evaluate the dynamic of firm creation and produce comparable data. The TEA provide information on the dynamics of entrepreneurial activity by grasping the rate of nascent entrepreneurs or owner-managers of a new business (GEM). According to a GEM data set⁴, Brazil experienced 15% TEA in 2011, the period 2009-2011 being the most dynamic in firm creation for the country in the last decade. Mexico had a TEA slightly under 10% for 2011 but with an irregular rate in terms of firm creation. Since 2008, Brazil and Mexico have both been more dynamic in new business ventures compared to a panel of developed countries (Table 1), with the exception of the year 2011 in Mexico.

<u>Table 1:</u> Brazil and Mexico at the top-three countries in terms of early-stage entrepreneurial activity



Data from Global Entrepreneurship Research Association (GERA) Last updated: May 7, 2012

Source: Global Entrepreneurship Research Association, http://www.gemconsortium.org/

21

⁴ Brazil sample counts all year: 8,000 face-to-face interviews, Mexico: 3,016 face-to-face interviews

2.2.2 Entrepreneurial ventures in Brazil and Mexico: Opportunities and obstacles

As firm creations have been particularly dynamic in emerging countries, the characterization of entrepreneurship in those regions has received greater attention. The comparison between two fast-growing economic regions, Southeast Asia and Latin America, has pointed out differences between entrepreneurship "as it was made and experienced" in Latin America compared to Southeast Asia. In the particular case of Latin America, there are a number of cultural, social, and economic factors that have a negative influence on the entrepreneurial context compared to other regions (Kantis et al., 2004, Kantis 2010).

Entrepreneurs in Latin America generally start smaller, invest less money and grow slower, and with lesser economic impact on the macro level than Asian entrepreneurs. A study carried out in 2002 by the Inter-American Development Bank (IDB) estimates that it takes 80 percent longer to identify a business opportunity in Latin American markets than in Asia. Mexico and Brazil have been respectively ranked 75 and 120 in the ease of starting a business while China ranked 16 (WorldBank data, 2011). Networks among Latin American entrepreneurs are usually constrained to family and close social circles whereas Asian entrepreneurs are directly integrated into business social circles, which could explain that new business ventures in Latin America target local markets while Asian ones are pushing towards exports (a study carried by GEM about the "high impact entrepreneurs" confirmed that Latin American entrepreneurs are the least likely to have international clients with only 13 per cent of the entrepreneurs interviewed having at least one-fourth of their clients abroad).

However, some similarities in the creation process should be highlighted: Most entrepreneurs are college graduates, male of 30-35 years old whose motivations tend more towards self-realization than material comfort. Their previous work experience constitutes a real stepping-stone for most entrepreneurs. Their previous employer is crucial for gathering the know-how, the contacts, and the financial support. High-impact entrepreneurs are in fact twice as likely as the general population to have a university or college degree. Among the entrepreneurs interviewed for this IDB research, a majority pointed out the lack of financing resources for the creation and the development of their business creation. In general, entrepreneurs in Latin America are facing a less favorable environment than in other geographic areas.

Within Latin America, similarities of the business ventures prevail over the differences among entrepreneurs' experiences. Entrepreneurs from Brazil and Mexico report similar regulatory obstacles, being primarily heavy taxes and excessively-bureaucratic processes. "Mexican and

Brazilian entrepreneurs complained the most about financial restrictions, which forced them to start their businesses with inferior equipment and technology" (IDB, 2002).

In Brazil, the additional obstacles of doing business are called the *Brazil cost (Custo Brasil)* (Sardenberg, 2012) that encompasses taxes and the cost of credit loans. Therefore, emerging economies such as Brazil and Mexico are at the junction between managed economy and entrepreneurial economy. Concentrated power structures, widespread business informality employment in the informal sector is estimated at 28% for Mexico and 45% for Brazil (OECD, 2005) - as well as deterrent administrative processes, impede efficient information and legal protection needed to develop successful new businesses (WIDER UNU). The MIT economist Rüdiger Dornbusch remarks that "the U.S. is a country with few rules and strict enforcement, versus Mexico, which has lots of rules and lax enforcement." Large national companies with greater influence are more likely to drive through the discretionary legal environment than entrepreneurs, which largely undermines the maturation of an entrepreneurial culture or the long-term success of new business ventures.

Nevertheless, the regulatory framework has been simplified since 2005 regarding the required delay to create a business that has fallen from 49 days to nine days (compared to 22 days required in the G20 countries) (Ernst & Young, 2011). Brazil has a more favorable access to capital than in Mexico when comparing the rate of loans to private sector being nine percent of GDP for Mexico compared to 28 percent in Brazil. The venture capital sector is largely under-developed in both countries; it represents respectively 0,04 percent of the Mexican GDP and 0, 16 per cent of the Brazilian GDP (Arregui,2012). Saxenian (2011) observes that "developing economies have two major handicaps: They are remote from the sources of cutting-edge technology and distant to the developed countries and the interactions with users that are crucial for innovations".

At the same time, there is a trend of cross-regional "brain circulation" (Saxenian, 2011) between mature ecosystems such as the Silicon Valley and developing economic regions, merging the technical and financing with the local structures. These "new Argonauts,⁵ the US-educated but foreign-born entrepreneurs" (Saxenian, 2011) use their expertise and take advantage of the economic potential of their native country and in doing so, they contribute to the emergence of centers of technology and innovation in different parts of the world, notably in emerging countries.

_

⁵ The notion is a reference to the Greek Mythology as the Argonauts travel on the side of Jason and accompany him in his quest. The term refers here to their character of adventurers.

3. Conceptual issues: Entrepreneurial ventures in spatial context

An entrepreneur has nearly total control over the initial process of his new venture; however, as an *embedded* agent, he is also influenced by his surrounding ecosystem which exerts considerable influence on his budding enterprise. The localization decision is important in shaping the future firm's growth (Audretsch, 2004), and cannot be solely apprehended by an analysis of the individual's personality, abilities and aptitudes (Mosakowski, 1998). Thus, localization matters for two reasons: It helps entrepreneurs to identify opportunities and to leverage resources and knowledge in order to attain performance (Shane & Venkataraman, 2000). Given the effects that "place"—the "black box of geographic space" (Audretsch & Feldman, 1998)—can have on a startup's results, this study will look into the motivations behind the entrepreneurs' decision. Urban economics theories, through the dynamic between economic activity and urban agglomeration, aim to grasp the origin of cities, the reasons underlying the existence of industrial clusters, and the uneven distribution of population across places (Strange, 2008).

The literature review aims at presenting the academic research that have emphasized the role of place, both at the micro and macro level, and its long lasting importance on individual decision-making, in the age of high-tech and real-time information.

3.1 Why do cities attract entrepreneurs?

3.1.1 A phenomenon of firm concentration: The clusters

In neoclassical theories, the entrepreneur has been integrated into the factors of production – being labor force and material inputs – which drive cities' growth (Glaeser, 2010). Metropolitan areas emerge and expand because their network of activities is associated with job expectancy (Armington & Acs, 2002; Fallick et al, 2006; Freedman 2008). Therefore, economic activities are concentrated in cities, instead of being spread out across a country, because the economic output is maximized thanks to economies of scale (Henderson, 1972, Glaeser 2007), influencing positively the levels of productivity. Rational individuals accept to pay higher rates by living in large cities because the environment enables them to benefit from amenities – also called inputs- and from the flow of ideas.

Entrepreneurs balance their decisions using the same basis. The supply function of entrepreneurs relies on "a spatial equilibrium" according to which, advantages of localization is offset by negative attributes (such as housing prices) (Glaeser, 2007). According to this

economic approach to cities, individual decisions respond to incentives, and the myriad of isolated decisions translates into a collective trend towards a similar place. Under such analyses, spatial differences are due to higher returns in certain areas, stimulating higher rates of business creation. The development of the Silicon Valley would be correlated with higher return in this area in the computer sector than in the rest of the country, attracting waves of new entrepreneurs (Duranton, 2007; Kerr, 2011).

Under previously examined sources of profitability, similar firms tend to cluster within a same area. The phenomenon of clusters has been popularized by Porter (1990) - also known as "co-agglomeration" (Ellison & Glaeser, 1997), "geographic concentration", "networks", "ecosystems"- but has been widely studied by urban economics theories (Saxenian, 1994; Markusen, 1996; Fujita & Thisse, 2002; Pitelis, 2012). The concentration of specialized industries in a same localization area has been identified as a factor of competitiveness even for regions as confined as a street (Wall Street for financial services) to an entire region (the Silicon Valley). The source of their advantage lays in the inter-firm cooperation (IFC) that the geographic proximity permits.

The Institute for Strategy and Competitiveness of Harvard Business School defines "clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region."

Starting with Marshall, the MAR model (Marshall, Arrow, Romer), later updated by Krugman (1988), points out that clusters originate from the mutual benefit that similar firms bring to each other. Numerous reasons have characterized the emergence of industrial clusters; they have been labeled under the notion of externalities - also called "economies of agglomeration". The local inter-firm mobility of an already trained and experienced labor force (Rotemberg & Saloner, 1990), the proximity with suppliers, the circulation of knowledge through direct contacts (Saxenian, 1994) or the possibility to outsource certain activities to similar firms (Angel, 1990) are reasons for same sector firms to hold together within a same perimeter. Mature clusters encompass four characteristics according to Pitelis (2012) that are the "geographical agglomeration, linkages, embeddedness and competition with cooperation".

3.1.1.1 Human agency and the pursuit of a productive opportunity

At the individual level, the degree of uncertainty that each entrepreneur associates with his or her venture impacts his or her decision-making, along with the assumptions he or she formulates about a certain place. Aspiring entrepreneurs exert their human agency through an understanding of the dynamics of the internal resources of the firm and the external conditions of its environment. A "productive opportunity" (Penrose, 1959) can be perceived or imagined but it constitutes the base of the ecosystem.

The geographic concentration of firms - the previously mentioned clusters - tends to increase overtime because many entrepreneurs foresee the opportunities of such places (Loasby, 1996, 2000; Sorenson & Audia, 2000). The comparison between the concentration of footwear companies in the US in the 1940s and in 1989 shows nearly the same results, proving the permanent high rates of firm creation within the clusters. Clusters are maintained throughout time under the influence of two phenomena: Lower failure rates of the companies within the cluster and a higher founding rate of new ventures (Sorenson & Audia, 2000). Recognizing the role of human decisions in triggering creation, the evolution and the development of clusters, emphasizes the role of entrepreneurial action and efforts to reap the advantages of a particular location, a role that was largely left behind by the early theories of clusters (Pitelis, 2012).

Yet, the well-known cases of startup clusters (such as Silicon Valley, the Taiwan Hsinchu cluster or the high tech pool in Israel) must not overshadow the cases of entrepreneurs that choose a location of their own – Microsoft launched its venture in Seattle, to take only this example. Furthermore, urban areas are a favorable field for new startups because they hold complementary and diverse activities altogether.

3.1.2 Cities as natural place for innovation

Urban environments are conducive towards innovation as their diversified and dynamic structures favor experimentations (Jacobs, 1969; Bairoch, 1988; Cortright, 2002). Innovations are produced in metropolitan areas; indeed, less than 4% of innovations came from rural zones (Jacobs, 1969). Externalities have been analyzed in a different – if not opposite – approach than the previous explanations about clusters (see 1.1). Advantages for new firms involve a process of "cross-fertilization" (Henderson, 2002) among firms that pursue different activities and can learn from one another. In this approach, whom main supporter is Jane

Jacobs, rather than clustering all together, firms benefit from experiencing a diversified environment. Major cities, such as New York City, are the ideal laboratory for new ventures.

Studies have illustrated the inherent benefits of a diverse and dynamic small-size firms urban network over a specialized large companies economic landscape. The decline of Pittsburg is due to its inability to stimulate firms creation while, by contrast, NYC "created a culture of entrepreneurship" (Glaeser, 2007; Hansen, Ban, Huggins, 2003). The constant interactions between heterogeneous groups of people (or firms) constitute a springboard for new ideas. Moreover, innovation lies in local competition, which improves productivity and stimulates growth. Maintaining vernacular culture – a rooted culture created by people who live in such places – is a key asset for urban neighborhoods to ensure innovation (Carr & Servon, 2009).

The main obstacle encountered by certain cities when developing – and attracting new activities - is not size but the absence of reaction towards urban functional problems, engendering stagnation (Jacobs, 1969). Thus, megacities- defined by Mc Kinsey Institute at more than 10M of inhabitants- such as major cities in emerging countries which often reach 20M inhabitants are often pointed out for their inefficiencies: Traffic congestion, lack of public transportation, overpopulation, economic polarization and social segregation are the common problems of sprawling urban areas to whom Sao Paulo and Mexico City belong to. Compared to small cities, they generate waste of money and energy considering that part of the population spends more than 2 hours daily in public transports reaching their work place (The Economist, 2011).

Jane Jacobs (1969) recognizes that the impracticalities of cities are intensified by its size; nevertheless she offers an alternative approach to tackle them. She supports that "efficiency fails to make a city prosper" and that productivity cannot be considered as measures of health for a city. The city, because of its myriad of impracticalities, is the essential laboratory for the invention of new ideas and innovations to overcome the problems (against noise pollution can be developed acoustic buildings for instance).

3.1.3 The diversified urban areas as "nursery" for future firms

Integrating to their analysis, both the existence of clusters and of diverse urban setting, Duranton & Puga (2001) assume that the nature of externalities changes and evolves

_

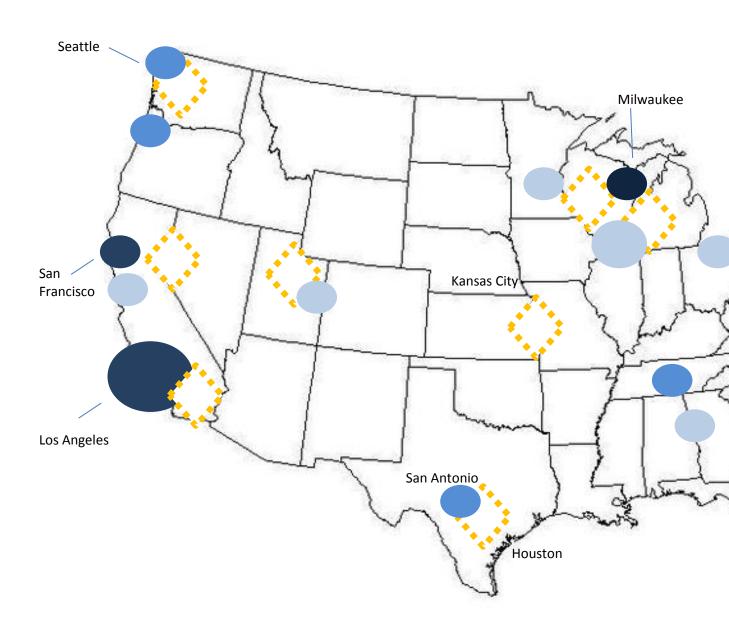
⁶ Jane Jacobs takes some western examples to support her argument: The observation of economic development rate (measures the ratio of new production for a time period of a decade) proves that Birmingham was more innovative in the long run whereas Manchester, which experienced higher productivity rates tended to stagnate, p.96

throughout the product development. A young firm will tend to settle in an environment favorable to experimentation, a melting-pot of complementary activities, which enables it to access a wide range of components and heterogeneous competences (Audretsch & Feldman, 1998). Thus, "location in a diversified city during a firm's learning stage can be seen as an investment" (Duranton & Puga, 2001) as the entrepreneurs accepts higher production costs in the early development stage. Higher production costs derive from the relatively more expensive housing (and cost of living in general) in larger cities.

These urban areas act as "nursery" (Duranton & Puga) because they offer the capacities to find the ideal opportunity, the appropriate positioning and the adequate production process for the young startups. This theoretical framework has based itself on empirical evidences: A study, which collected data for six science based-sectors in the US, did not find any link between specialization of a region and the innovative outputs (Audretsch & Feldman, 1998). NYC is a suitable laboratory for many entrepreneurs because of its size and diversity, especially for creative industries (fashion, design, artists, etc.).

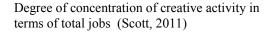
The "creative field" (Scott, 2011) – that is related to the "learning region" of Florida (1995) – is composed of four elements which contribute to foster innovation: A variety of producers with different areas of specialization, a human labor that contributes to bind the urban structures altogether, a range of leisure amenities and activities and finally the presence of institutions and collective action (Scott, 2011). As there is no unique definition for the notion of creativity, this present research narrows the concept to its relation with innovation: Creativity, both at the individual or collective level, produces new insights on the production of ideas or objects. Innovation is the process leading the implementation of these renewed insights (Scott, 2011). The social milieu fashioned by the creative city enhances innovation through the synergies of all its components. It is then, not surprising that where creative activities are anchored, entrepreneurial ventures flourish (see figure 2).

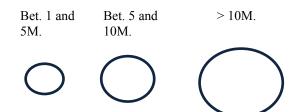
<u>Figure 2</u>: Geographic concentration of cultural activity (in terms of jobs) with the epicenters of information and communication technology (in terms of job creation)



Caption







Size of metropolitan area in M. inhabitants (Scott, 2011)

Job added be area of Information Communication HBS, 201

Source: The author based on the cross-mapping of Scott's cultural activity centers with Porter's high-tech epicenters

Whether firms are attracted by specialized – the clusters – or diversified urban areas, the relation between agglomeration and economic activity has been identified: Cities are conducive to innovation, primary stimulus of economic growth. Cities' role is assimilated to the one of "nursery" (Duranton & Puga, 2001) because they produce externalities that make them attractive to entrepreneurs. The following section will further detail the essential resources to entrepreneurial process, and to which extent those that are of primary interest for knowledge-based entrepreneurs.

3.2 The utilitarian value of place

The economic, political and cultural ecosystem plays an influence on the individual's behaviors and decisions. Institutions, whether there are financial, legal or academic provide "the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction" (North, 1990). Beyond established institutions, the role of informal ties – such as networks- play a crucial role for new ventures. Following are emphasized some important institutions that drive entrepreneurs in certain places.

3.2.1 The resource-based input

In past literature, the reasons behind the attraction of certain places to entrepreneurial ventures were first, the presence or abundance of a natural resource. In the late 19th century, the oil industry settled in Texas or Ohio, where the oil was last-discovered (Glaeser, 1992). The necessity to easily dispose from inputs - raw material and labor force - avoiding major transport costs, was then a major argument in the localization of new ventures. The analysis of

footwear industries in the US (1940-1989) highlights that the proximity to raw material - leather from tanning industries in this case (Sorenson & Audia, 2000)- and to consumers played a large role in the geographic concentration. The high rate of entrepreneurship was also attributed to the network of independent suppliers.

Optimizing transportation costs and being close from inputs such as raw material are less relevant for the knowledge-based sector as the final output has often minimal transport costs. The inputs these sectors require are human and financial capital (Stuart & Sorenson, 2003) and their proximity can "facilitate the free information transmission" (Glaeser, 1992).

3.2.1.1 Human capital and knowledge spillovers

The New Technology-based Firms (NTBF) heavily rely on a highly specialized and educated human capital (Dahl & Sorenson, 2009) and the venture's performance is positively correlated to the level of specific knowledge in economic and management fields of its founders (Colombo & Grilli, 2005). Becker (1964) defines human capital as "the knowledge and skills acquired through formal and informal learning that resides within individuals"; each individual has a "stock" of knowledge that is correlated to his future earnings.

At the early stage of the venture, the recruitment will primarily rely on networks, therefore the presence of highly specialized human capital, already trained in similar firms, is a strong incentive for entrepreneurs to settle in certain regions, as they do not have to undertake this investment (e.g training). Quigley (2002) observes that students are very likely to settle after graduation where they have been educated and where they have built their first personal network. Universities act as "magnet" (Quigley, 2002) and the mutual benefits that universities and firms provide to one another create solid arguments for the region to attract new entrepreneurs.

In fact, human capital is not only composed of the education of the employees but also their experience (Mondragon Velez, 2007). Thus, new startups might be attracted by established firms of the same sectors in order to benefit from their knowledge (Jaff et al., 1993). Launching a new venture within the same perimeter of other similar businesses also increases the chance for 'a better matching' with the labor force. The formation of a group of business advisors with sophisticated expertise is a strong argument to attract innovative entrepreneurs (Frederico et al., 2001). Also, neoclassic theories have observed that people who live in more educated areas tend to earn more, their productivity being higher probably through the

exchange of ideas. Proximity is not just a way to reduce costs of transportation but also to facilitate more direct interactions.

The advantages produced by direct and constant communication between people or between firms have been identified as knowledge spillovers. The literature about knowledge spillovers is abundant and their effects seldom disputed. Researchers have intended to answer this question: How do small startups, with no R&D, obtain the pre-requisite knowledge to their venture? They observed that these small enterprises benefited from third-party firms or institutions (universities or laboratories) own knowledge. Communication between people and between firms is more frequent; rapid inter-firm mobility allows knowledge and savoir-faire to move fluidly between economic agents. Also, fierce local competition generates faster innovation and is an essential vector to knowledge transmission (Jacobs, 1969). The ways undergone by the diffusion of knowledge are plural and range from formal alliances between firms to information conversation (Scott, 2004)

The knowledge spillovers have proved to be geographically bounded (Jaffe, 1993; Feldman, 1994; Zucker et al, 1998) and tend to stay in the region where this knowledge first initiated. Therefore, finding the localization which fosters knowledge is fundamental for a startup.

3.2.1.2 Financial capital

According to recent literature, no input is more important for entrepreneurs than the availability of financial capital. Financial resources raise the chance for the startup to survive as it provides a security net, in case of an unexpected turn that hinders its capacity to innovate. Therefore, the access to a primary source of capitalization is of primary importance for entrepreneurs.

Liquidity constraints generate negative effects on the decision to start a new business; the wealth of household is therefore positively correlated to the rate of business ownership (Holtz, Joulfaian, Rosen, 1993; Gentry & Hubbard, 2004). It holds true especially in the case of young businesses that are denied access to external sources of financing such as loan credits through banks. A majority of new startups rely on their personal – or relatives' – savings which means that initial capitalization is generally small. This is due to the asymmetry of information that exists between small risky ventures with no clear financial statement and

established credit institutions. The impossibility to foresee the survivability of a business render hazardous the chance of returns for banks, therefore entrepreneurs have difficulty to find external sources of financing (Ang, 1991; Berger & Undell, 1995; Gregory et al, 2005).

An alternative study shows that personal wealth and rate of new venture are not necessarily linked if one considers the entire bulk of entrepreneurial ventures, although capital intensive activities might be restricted to the wealthier proportion of entrepreneurs (Hurst & Lusardi, 2004). Moreover, Astebro & Bernhardt (2003) found no correlation between contracting a loan and the survival of new businesses, while there was a clear link between non-bank loans and the success of startups.

Therefore, entrepreneurs heavily rely on external sources of financing other than banks. It exists a multitude of actors with different investment's objectives: The Business Angels (BAs), the Venture Capital firms (VC) and the Private Equity firms (PE). Each of these institutions play a different role, from the early-stage to the development of a new startup (see table 2). The BAs constitute a significant source of financing for the startup, especially in its early-stage (Sohl, 2003). BAs can be individuals who invest their own money, provide advice and expertise and can play the role of the "ambassador" for the firm (Hernan Fernandez, 2012).7

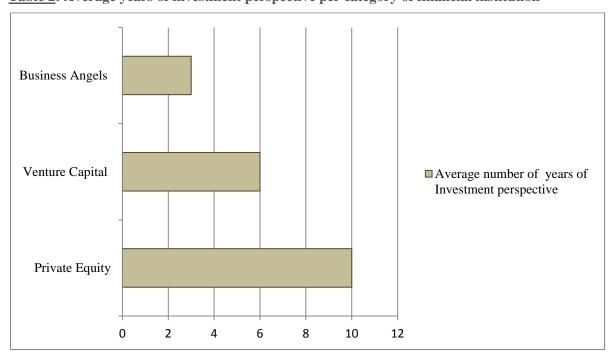


Table 2: Average years of investment perspective per category of financial institution

Source: Conference by Hernan Fernandez, Partner at Angel Ventures Mexico, 10/11/12, Mexico City

⁷ Conference of Angel Business Ventures; 2012, October 11th, in Mexico DF.

The role of VC as a primary support for new startup has received a solid attention compared to BAs (Gompers & Lerner, 2001). Back in 1988, Florida & Kenney conclude that "although VC is not absolutely necessary to facilitate high technology entrepreneurship, well-developed VC networks provide tremendous incentives for entrepreneurship by lowering the difficulties of entering an industry". VC intervene through two vectors; by providing financial support and a hands-on management team (Hellmnan & Puri, 2000) forcing the startups to become more professional. Among Latin American countries, Brazil, Chile and more recently Mexico, have identified that encouraging VC was essential for the emergence of innovative startups (Kantis, 2012). The high tech startups are the primary target of these investors: The software sector received 24 % of total VC investments in 2011, the biotechnology received 17 % and the Energy sector 13 %. (Data National Venture Capital Association, 2011).

More than 49 per cent of US companies financed by Venture Capital firms are located in the same places as their investors. According to Harvard Kennedy School (2010), half of investments emitted by VC occur outside their own geographic areas. Nevertheless, the investments were concentrated into a handful of places (primarily Boston area, San Francisco, New York). Therefore, some research have observed a positive correlation between the availability of capital within a region and the presence of innovative young startups. Indeed, VC intends to circumvent the moral hazard and asymmetry of information by investing in startups that are geographically close.

Kantis (2012) & Murray (2012) have recently pointed out the VC do not intervene as often in seed capital to help launching new companies than BAs. In 2011, out of all VC investments in the US, only 3 % were targeting seed startups compared to 29 % and 34 % for early-stage and expansion phases (DNVCA, 2011).

Human and financial capital have been identified as key resources for knowledge-based sectors that is why entrepreneurs look to settle near these two sources. However physical proximity does not guarantee the entrepreneur will benefit from them; therefore, social professional networks are key in the process of knowledge transmission (Sorenson et al, 2006).

3.2.2 The Network and the importance of the entrepreneurial culture

"Culture" has gained relevance in the post-industrial economy as key determinant to the economic growth of certain region. The notion of regional identity refers to the social image

of a specific place that is shared both by the insiders and the outsiders, which influence the investment decisions of agents (Romanelli & Khessina, 2005). The face-to-face interactions and regular contacts are helping to build a comprehensive place identity (Storper & Venables 2002). Certain places benefit from positive image that are the products of the diffusion of its success.

Not only is the "endowment of human capital" (Audretsch, 1998) relevant but the interactions between individuals are also salient. In a study comparing both Silicon Valley and the Route 128 near Boston, Saxenian (1990) observes that Silicon Valley was able to overcome its stagnation (firms were hit by Japanese competition in the early 1980s) through a "decentralized productive system" (Saxenian, 1990) favoring flexible manufacturing (the "mini-fabs"), in order to quickly response to demand changes. The region promoted a culture of fluid and informal communication as well as collaboration 8 conducive to collective learning and attracting new firm creation. Social proximity reinforces trust and reciprocity and facilitates knowledge transmission (Agrawal, Kapur, McHale, 2008). Thus, the ongoing diffusion of learning in Silicon Valley contributes to the good performance of startups: 90% of Silicon Valley manufacturing startups survive their first six years of experience where nation-wide, results show that 75% of startups survive their first two years. ⁹ Entrepreneurs benefit from a network of complementary sources of knowledge; Stanford University, consulting firms...as well as strong social networks – family, alumni, ethnic groups - which provides "technical, financial, and networking services" (Saxenian, 1990). The sense of community allowed by inter-sectoral mobility is a strong argument to explain the capacity of attraction that exerts Silicon Valley on entrepreneurs.

The spatial localization of entrepreneurs remains partly dependent on the image conveyed by certain places. The reference of something is "in the air" is not recent. Launching a new business is always a risk-taking venture, thus, entrepreneurs are in search of legitimacy in order to control the uprising uncertainty. For instance, an entrepreneur entering the entertainment industry might seem more legitimate to potential investors or future customers if the entrepreneur is based in Los Angeles. In order to counterbalance the risks of new venture, entrepreneurs leverage their social capital – "the pre-established relationships and reputations with resource holders" (Stuart & Sorenson, 2003) – in order to overcome the

⁸ The collaboration between semi-conductor start-ups is visible through 350 alliances contracted since 1979 (technology sharing, subcontracting, and joint product development (Saxenian, 1990)

⁹ Results based on a 20 years study (1967-1987) carried by Pr Albert Bruno for University of Santa Clara's School of Business, cited in New York Times, March 7, 1988.

uncertainty and reassure their future partners (employees or investors). The role played by informal contacts is even more preeminent in the early-stage of firm creation as it helps identifying opportunities, leveraging resources and expertise (Elfring & Hulsink, 2001). The previous connections tend to be geographically bounded. "The amenity-based development" (Carr & Servon, 2009) of a place is not sufficient in explaining the attraction of certain economic activities over others; the local culture and its projected image are also important factors to take into account.

The "reputation effect" produces the risk (Sorenson & Audia, 2000) that it will discourage individuals to consider the past performance of local firms because entrepreneurs assume that "if so many similar businesses are settled there, it must be a good place" (Carroll and Harrison, 1994).

Box 1: Notes on the business incubator

"The business incubator is widely believed as providing a nurturing environment for new business startups" (Mian, 1995). The concept and practice of business incubator first emerged from Universities, which were the first ground of experiments. Today, the incubator is an "hybrid organization" (Almeida, 2005) that facilitate the process of business creation by providing the young firms a range of tangible services (subsidized rental space, programs of mentorship, administrative services ...) in order to reduce the risk of failure in the very vulnerable phase of the premises starting a business and maximize the potential of the newly incubated firms (Aernoudt, 2002). The services offered by the incubator to the new ventures can be derived from three main sources: (i) A stimulating environment that encourages the sharing know-how and best practices, (ii) the access to mentors and technical advisers and (iii) the more visibility and credibility towards the marketplace. Many researchers argue that beyond the physical proximity, the key determinant to a successful incubator is in the possibility of networking and mutual aid.

Incubators are increasingly popular among the fast-growing economies of Latin America. Brazil's government has largely been playing a role in promoting business incubators although compared to other countries such as Chile, the ecosystem was mainly bottom-up. (No reliable data was found for Mexico).

3.2.3 The entrepreneurs' private decision-making towards non-monetary interests

The previous determinants that drive the entrepreneur's choice, center on his analysis and perception of the market and environment as a base for his decision. Nevertheless, thinking of entrepreneurs as "embedded" agents also implies to envisage their social attachment to certain locations. The entrepreneur can decide to favor his personal and affective social life and therefore choose a region, a city or a neighborhood that is close from his/her relatives. Based on a Danish database of entrepreneurs, Dahl & Sorenson (2009) distinguish two sets of priorities; either the entrepreneur favors the localization because of its proximity to friends and family or they prioritize according to the externalities of a given economy that can directly benefit their ventures. Their results explicitly prove that entrepreneurs are even more inclined than employees to stay within familiar environment (Michelacci & Silva, 2007), even when these environments prove to be less favorable economically than other places. In such a study, the maximization of performance for their future venture is not a primary determinant of choice.

Jackson (1994) notes that "certain localities have an attraction which gives us a certain indefinable sense of well-being"; the attraction that San Francisco exerts on high-tech companies confirms that entrepreneurs are sensitive to the lifestyle. Indeed, the city gathers 1,700 tech firms (employing 44,000 people). The main entrepreneurs of the most important digital startups (Yelp, Yammer, Autodesk, and Zendesk among others) have explained their localization (preferred to Palo Alto) because of the atmosphere of the city, the agreeable amenities that the city has to offer (Modern Luxury San Francisco, 2012.)

However, by staying in a familiar environment, entrepreneurs are not necessarily misguided. Dahl and Sorenson' conclusions draw a correlation between the entrepreneur's localization choice and the performance of their venture. The choice to create their startups in the same region of friends and family does not necessarily represent an economic trade-off but can be considered as a necessity to leverage local knowledge and personal network, therefore using the positive effects of a familiar environment. The expression "love money" refers to the first capital gathered by the entrepreneur among his relatives in order to initiate his business. In Latin American countries, entrepreneurs largely depend on their own savings, as well as their family's due to the infant stage of private investors and VC's development (Kantis et al, 2004.)

"Regional *embeddedness* captures multiple dimensions of the relationship between an individual and a place, (...); entrepreneurs are not only driven by incomes and they are usually driven by non-monetary interests" (Dahl & Sorenson, 2009). In the end, the results based on the Danish entrepreneurs' database highlight that geographic inertia is beneficial in their cases; the ventures of the locally embedded entrepreneurs prove longer-term success and higher cash-flows than the entrepreneurs that moved away from their original region.

These results contrast with the study carried by A.L Saxenian and who portrays contemporary entrepreneurs as the "new Argonauts". They possess the ability to navigate through "not only new technology but also new places". According to Saxenian (2011), in the late 1990s, three out of ten startups in the Silicon Valley were run by immigrants and 60 per cent of the Silicon Valley's workforce for science and engineering (S&E) was born outside the US¹⁰. This particularity of Silicon Valley high- tech companies can be extended at the level of the US as one-fourth of the startups has been established by immigrants. Using their extensive network, these global entrepreneurs arbitrate among different places leveraging the externalities of each ecosystem. Using the cultural and institutional knowledge of their country or region, the immigrants, educated in the US, can benefit of both places externalities. Therefore, the headquarters' location does not entirely reflect the ecosystem in which the firm evolves.

3.3 Is localization decision a rational process?

Up to this part of the literature review, the entrepreneur has been considered as a rational agent that has total control over his or her own decisions. Yet, a long tradition of Behavioral Finance research, grounded in psychology, has pointed out that individuals are clearly not *homo-economicus*. The impact of overconfidence on economic decisions has been observed as a factor that generates different "cognitive processes that result in different perceptions and interpretations of themselves and their environment" (Burmeister & Schade, 2007).

Launching a new business is a risk-taking enterprise surrounded by uncertainty, and the entrepreneurs react differently to the unpredictability of their situation. Overconfidence is a personality trait often associated with entrepreneurs (Cooper et al 1988; Koellinger et al 2007) as a tendency to disproportionately trust their own predictions or future success. Cooper et al. (1988) show that 81 per cent of entrepreneurs estimated their chance of success to be at least of 70 per cent. Entrepreneurs, more than other economic agents, tend to rely on biased

-

¹⁰ 2010 Index of Silicon Valley http://diasporamatters.com/wp-content/uploads/2011/05/Diaspora-Toolkit-Booklet-1.pdf, p.3

perceptions, which lead them to overestimate their control over their venture (Koellinger, Minniti, Schade, 2005). Therefore, the hypothesis that localization of the startups has not really be well-thought out by the entrepreneur cannot be disregarded.

Prior research exemplifies that a majority of entrepreneurs enter the business that they previously worked with (Milton, 1990). The trend which pushes employees from incumbent firms, to create their own ventures is called "spinoffs" (Klepper & Thomson, 2005). The reasons why new entrants appear is not always clear but their effects on the dynamism of a region have been demonstrated.

Yet, high tech sectors might be less concerned by the experience factor. "The advantage of 25 years of experience is irrelevant in such a high-growth industry", remarked Eli Noam, economics teach at Columbia University, when talking about young students of his that embraced entrepreneurial ventures as their first job experience. 11

3.4 The relevance of place in the decision process or the death of distance 12

The notion of place is a difficult concept to grasp, overflowing with very different meanings (Hayden, 1997). The recent globalization, defined by the increasing influence of fast ways of communicating and free circulation of information, on economic activities, challenges the relevance of "place" and "local" in the entrepreneurial process. The delimited geographic delimited area tends to be disregarded as a meaningful unit (Audretsch, 1998, 2012). At a time where firms open online databases of shared practices for their employees to use as a source of "accumulated wisdom" (The Economist) wherever they are in the world, it is legitimate to question if geography still matters for entrepreneurs. Entrepreneurs are looking into alternative sources of financing such as crowdfunding, which circumvent the traditional VC. "Crowdfunding allows founders of for-profit, artistic, and cultural ventures to fund their efforts by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries" (Mollick, 2012). Through the internet, entrepreneurs are able to call for seed capital to start their venture and they usually receive their funds under donations. Nevertheless, as it constitutes a very recent phenomenon, the lack of data and analysis impedes to conclude to the eviction of tradition investors by the crowdfunding. Furthermore, VC investors do not bring only money to the new startup but also advice, expertise and credibility.

¹¹ http://www.economist.com/node/598895 12 The Economist, (1995, September 30th). The Death of Distance.

The paradox to consider the importance of place in contemporary economic research in the age of "communications superhighways" (Audretsch & Feldman, 1998) has often been pointed out. Yet, much attention has been given to explain the success of the Silicon Valley and the determinants to replicate this success in other places. A first answer to this apparent paradox is to draw a difference between information and knowledge; while information navigates without any cost and disregards distance, knowledge and, in particular its transmission, requires time and therefore costs. Knowledge, especially when it intervenes in technical problem-solving is "sticky" (Von Hipples, 1994) meaning that it is costly to transfer from a location to another, therefore the need for human interactions and face-to-face contacts have not lessened in importance (Arrow, 1962; Glaeser; Kallal, 1992; Audretsch & Feldman, 1998). The impact of place is more acute when it refers to startups that are primarily driven by knowledge transmission. The high tech sector, which presumably requires a high percentage of qualified employees, is directly concerned. The conclusions based on the observations of the biotechnology industry, a knowledge intensive sector, demonstrate the concentration of these firms in a handful of localizations (Prevenzer, 1997). Another element underlined by research at Babson University, is the importance of local culture. The ecosystem revolving around the entrepreneurs is a combination of resources

Academic studies have highlighted a large array of conditions under which places are able to attract innovative entrepreneurs. These theories remain fragmented and failed to come to a consensus (Page West III & Bamford, 2005). In the premises of research about localization's decision factors, transportation and inputs such as labor and raw material play a significant role. Nevertheless, knowledge-based sectors output is not directly driven by the same inputs. Specifically, knowledge spillovers and financial capital need are of primary interest for entrepreneurs. The rational entrepreneur balances his decision in order to benefit from positive externalities of a place while avoiding, as much as possible, the negative ones (traffic congestion, high price rent or lands...etc)

Both actual resources and perceptions of these resources are included into the decision process when identifying a particular place. The localization decision-making is a process that encompasses a rational deliberation of different factors, but also the preferences and the perceptions of the entrepreneur on his or her own environment.

4. Methodology

As previously defined by the literature review, this research participates in the debate about the relevance of place in social sciences and its importance for economic actors. Given that the study examines the crucial factors behind a decision-making process, the case study, by the mean of empirical studies, has been selected as the most relevant research instrument (see 4.1). Furthermore, this research is conducted through a unique perspective within two emerging cities, Mexico City and Sao Paulo, and further delves into particular neighborhoods within the cities (4.2). In order to analyze and challenge common views about the role of localization for the individual entrepreneur, it is necessary to focus on the micro level through interviews of entrepreneurs (see 4.3).

4.1 The case study approach

The case study is one instrument of social sciences research. Case studies are relevant to observe and explain some contemporary social phenomena based on empirical data. It is used not only towards a descriptive objective but also as "an explanatory" tool (Yin, 2008). As a research method, it has entered the field of entrepreneurship because this qualitative method has been recognized as relevant when studying "complex change processes" in depth and in their natural setting (Curran & Blackburn, 2001; Ghauri & Gronhaug, 2002)

The case study is used when the research questions can be answered by "how" or "why" (Yin, 2008). In fact, the case study is particularly appropriate in this present research as it intends to unveil the decision process of some agents by answering why they were taken, how they were implemented and with what results (Schramm, 1971).

Yin (2008) distinguishes three conditions that a research needs to respect in order to use the case study appropriately (see table 3) (1) the type of research question posed (2) the extent of control an investigator has over actual behavioral events (3) the focus on contemporary events

Table 3: Comparison between two research methods: Case study and survey

Method	Form of Research Question	Requires Control of Behavioral Events?	Focuses on Contemporary Events?
Case Study	How, Why	No	Yes
Survey	Who, What, Where, How many, How Much	No	Yes

Source: Yin, 2008

The other possible method that looks into contemporary events yet does not control the results (contrary to an experiment in a laboratory for instance) is the survey. The survey is advantageous in the case of a research examining the prevalence of a phenomenon (how much, how many, how often) with the objective to "predict" results in the future. This present research intends to provide access to the reasons that motivate entrepreneurs to settle in certain environments when creating their startup, which is why the case study is the preferred method. Furthermore, the absence of satisfactory quantitative data about entrepreneurs in emerging countries for our sample (especially considering the narrowed definition adopted) excludes the possibility of quantitative analysis. Gibbert et al. (2008) notes that the case study is particularly relevant in the early development of a research theory when the phenomenon is not completely understood and remains in a stage of infancy. This present research, by applying variables, initiated for developed countries, to emerging entrepreneurial landscape in Brazil and Mexico, meets this last criterion.

4.1.1 Multiple-case study

The rationale behind the multiple case study method is the comparative approach of two comparable cities – Sao Paulo and Mexico City. Urban economics theories are applied to new environments— in this case, an entrepreneurial ecosystem in two emerging cities. Each entrepreneurial ecosystem constitutes a "whole" study in itself that lends itself to draw cross-conclusions. Understanding that the multiple case study leads to stronger conclusions than individual case study, this research has opted for a two case study design. The choice of this particular design is also appropriate to the time period of this research. The selection of two ecosystems at a similar stage of development establishes a stronger basis for the credibility of results and dismisses the possibility of exceptions. Furthermore, this research aims to reach some broader generalizations that go beyond the presentation of a particular situation. Pursuing this objective, the multiple case analysis is based on a principle of "literal replication" according to which each experiment is selected to predict or contrast the results and in the end, provide a solid answer to the complex phenomenon observed. In this research, the cases have been chosen in order to "predict similar results" (Yin, 2008).

4.1.2 Methodological justification of the multiple case study approach

The advantages of the case study as a research tool have been recognized. It is grounded in "lived reality" (P. Hodkinson & H. Hodkinson, 2001) and case studies are useful to tackle "decisions" as the major focus of case studies (Yin, 2008). Also, they provide relevant data

when applied to a delimited area such as a region or a city. However, researchers have raised some doubts about the viability of the case study. Relying on disparate sources of information, the resulting broad documentations risk hampering data analysis. A traditional flaw that has been widely discussed in the case study design is the impossibility to generalize from particular cases. Nevertheless, some research have highlighted some possible ways to extend the finding.

As the case study research serves several purposes – it can be descriptive, exploratory or explanatory (Yin, 2008) - and the methodology has improved in terms of sophistication, it has been rehabilitated. For example, the lack of rigor that was attributed to this method has been dismissed through codified steps and guidelines (see 4.3). The objectivity of the researcher in this process is fundamental in order for the results to be completely free from manipulation.

A set of four tests has been identified in order to validate the good conduct of an empirical research method (Kidder & Jud, 1986; Yin, 2008). First, the researcher must pursue the construct validity in order to respect the objectivity of the results. This present research is based on multiple sources of evidence, such as urban economics theories and the literature on industrial clusters that serve to explain the dynamism of certain localization. The external validity is concerned with the extent to which case study results can be generalized. Yin (2008) raises the problem of studying a specific neighborhood and the challenge of generalizing based on the results from one particular context. However, the analytical generalization is not a mere replication of the absolute results but of the method adopted according to the chosen variables. For instance, in The Death and Life of Great American Cities (1961), Jacobs identifies the benefits of parks for a city based on the single-case of New York City. In essence, her empirical results contributed to the general theory of urban planning and to the observation of other cases. In order to support strong results, this research has selected two neighborhoods, one in each city, Mexico City and Sao Paulo (see 4.2).

Finally, the concern of *reliability* commands the researcher to document his process and follow a strict protocol. Case studies' protocol encompasses the design of the case, the collection of relevant data, and the analysis of new data in view of finally reporting them. The investigator's objectivity is reinforced by the non-preference for any of the field research. The section 4.3 details the operational steps observed in these two-cases study analysis.

4.2 Sample: Comparative approach in Mexico City and Sao Paulo

The literature review has revealed the hegemony of studies carried through the scope of the US and Western Europe experience. Urban economics theorists all support their analysis by studies carried out in American – or less often European – cities or regions (Silicon Valley, New York City, Berlin to cite only these three). Leading emerging economies have recognized the importance of entrepreneurship for their development to encourage innovation and boost economic growth. Thus, Latin American countries are maturing startup ecosystems with tailored activity suitable with the growing demand of their respective rising middle class. Leading the trend, Mexico, Brazil and Chile are experiencing "a technology boom" with high penetration internet rates. The scope to improve urban structures' quality, to procure regulatory incentives, and to attract VC financing are commonly shared objectives among Latin American economies. Beyond the ecosystem of large companies, both countries are nurturing young and innovative entrepreneurs, through incubators, non-profit organizations, and events that gather the professionals of the sector.

Mexico and Brazil are the main economic drivers of Latin America and both countries' development path is very often compared with one another. In the last decade, the Brazilian economy outpaced Mexico's in terms of growth, 7,5 % annual growth rate compared to 2 % for Mexico (The Economist). This year, by contrast, researchers from Nomura released a analysis of the potential of both economies, concluding that "Mexico could overtake Brazil as Latin America's number-one economy by 2022". This rivalry offers the possibility to compare both economies.

4.2.1 Featuring two global cities: Mexico City and Sao Paulo

Latin America is the most urbanized region in the planet (McKinsey, 2010). The spread of megapolises throughout the world, and in particular in emerging countries, have heightened the interdependence of the rest of the country towards those giant cities. Sao Paulo and Mexico City are no exception— the definition of megalopolises stands as 'a network of urban regions {...}, that constitutes the system of control over production and market expansion of the global economy (Friedmann and Wolff, 1982). Both can also be labeled *global cities* (Friedmann, 1986; Sassen, 1991 y 2002; Knox & Taylor, 1995). The concept of a global city encompasses qualitative aspects that go beyond the city's dimensions or population (Parnreiter, 2002). Mexico City and Sao Paulo strong of respectively 20 M and 18 M inhabitants are the epicenters of their national economy and productivity, respectively driving

20 % and 15 % of the national GDP. They bring together multinational firms' headquarters and harness dynamic financial markets; they attract foreign capital (FDI), and concentrate major decision-making powers (although Brasilia is the administrative capital of Brazil).

In a lot of aspects, Mexico City and Sao Paulo resemble each other. Although their contribution to the national GDP decreased in the last decade - Sao Paulo's growth was 66% of Brazil's GDP while Mexico City still maintain a level similar to the national GDP but by not much 106% - (McKinsey, 2011), they polarize new economic activities of higher productivity, which even reinforced their status in the network of global cities. The tertiarization of both cities visible through the increasing participation of services (financial sector, communication, real estate, etc.) in the national GDP reinforces their role as main economic driver. Mexico City and Sao Paulo were losing their control over factories, which move to minor cities, other activities substituted as growth drivers.

Another common characteristic of both cities is that they face severe infrastructure inadequacy and environmental problems as their peripheries continue to expand. Sao Paulo's vigorous demographic development of 5% yearly growth was accompanied by waves of immigrations that reinforced the national rural exodus. Since 1970s, Sao Paulo Metropolitan Region regroups 39 municipalities (*as subprefeituras*, see Figure 3), spread out from the center "in a large octopus shape with 70 km East- West axis and a 50 km North-South axis" (Cand Schiffer, 2003). Mexico is also severely extended with 16 delegations along with another 59 smaller towns, which constitute the State of Mexico DF.

Sao Paulo is characterized by a high degree of segregation, with wealth concentration in the central areas and impoverishment of distant zones, directly dependent on the centre. Mexico City's urban organization is even more fragmented but is equally segregated. The coexistence of wealthy areas comparable to gated communities along with really destitute areas represents the common urbanization pattern (Guerrien, 2004). Certain parts of central areas (which include our field research, see 4.2.3) are recently being gentrified to become lively – yet peaceful – places to live.

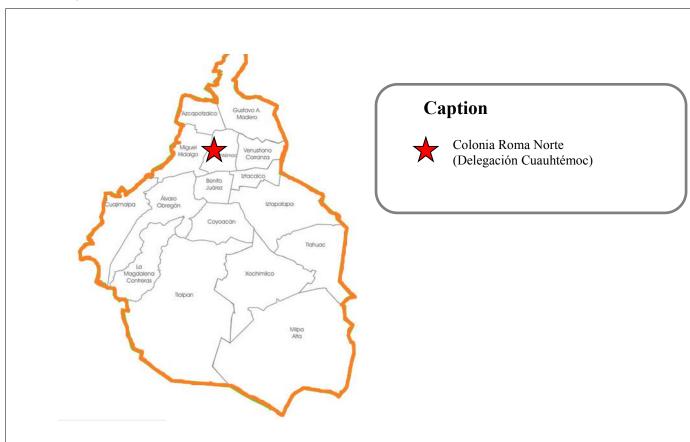
Figure 3: Administrative maps of Mexico City and Sao Paulo and the studied neighborhoods

Mexico City's surface



Source: Search of the author for « Mexico Districto Federal, Mexico » on Google maps

Mexico City and its administrative units (las delegaciones)



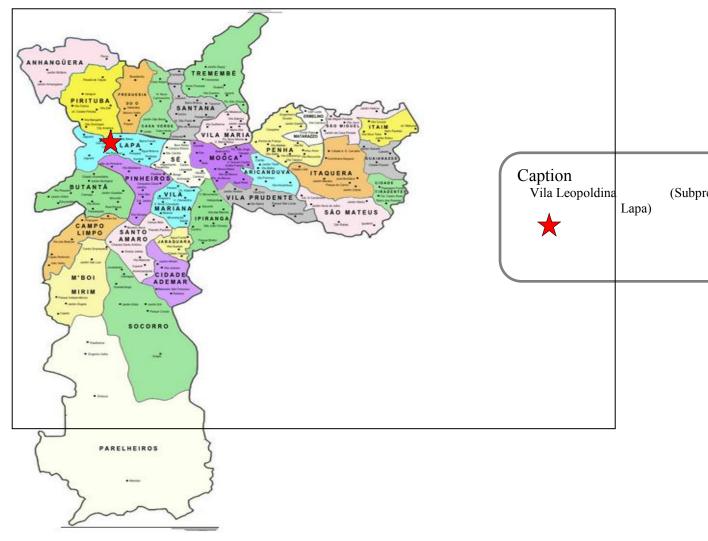
Source: http://policiadeldfcultura.blogspot.mx/2009/11/felices-185-anos-querido-defe.html, adapted by the author

Sao Paulo's surface



Source: Adapted by the author from Google maps

Sao Paulo and its administrative division (as *subprefeitura*)



Source: Adapted by the author from http://www.saopaulo.tk/

4.2.2 Neighborhoods in rehabilitation: Vila Leopoldina (Sao Paulo) and Colonia Roma (Mexico City)

Studying the trends that move entrepreneurs to certain localizations at the scale of the entire city is an impossible task due to time and knowledge constraints. In order to enclose the field of possibilities, this research concentrates its effort in two neighborhoods, one in each city. The neighborhoods have been selected according to certain criteria: First, both neighborhoods have been experiencing recent and rapid mutations with the transition towards new economic activities. Vila Leopoldina and the Colonia Roma Norte represent good laboratories in which the author was able to collect and dissect extended information about the constitution of each

neighborhood but also about the perceptions and interactions of the entrepreneur towards his work environment.

4.2.2.1 Vila Leopoldina: The revitalization through its deindustrialization

Vila Leopoldina, predominantly industrialized in the 1980s and 1990s, is rapidly attracting third sector and creative activities (advertisement agencies and fashion brands). Its convenient localization near main arteries of traffic and its connection to public transportation infrastructure have completed the development of real estate projects. In lieu of the industrial factories, emerged several condominiums and more commercial offices. More people are attracting by the business opportunities such as a restaurant owner interviewed in the neighborhood that has seen in the few months more and more firms coming to settle in the neighborhood (field research, June 2012).

According to Herzog Real Estate, rental prices are the lowest in the central zones of Sao Paulo. A student interviewied, who has grown up in the neighborhood, and whom family is from Vila Leopoldina, confirms the evolution: "At the time that I was born, we lived in a big old house with a large property around. We had a house in the middle of the city, with dogs, ducks and chickens" (email, June 2012)¹³. Vila Leopoldina belongs to the intermediary ring", which is characterized by its proximity to central areas with medium densities and vacant spaces (Nobre, 1998).

The local government of the neighborhood of Lapa has also shown the desire to accelerate the development of the region, characterized by its denomination "Zona industrial em Reestruturação" (ZIR) due to the presence of numerous warehouses witnessed of the industrial activity of the region. The valorization of the neighborhood would pass by the creation of green spaces and public infrastructures. The neighborhood increasingly attracts commercial activities and new residents due to its good accessibility relatively to other peripheral regions. The presence of the CEAGESP, a wide market of primary products organizing the commercialization for the state of Sao Paulo of goods coming from all parts of the country, has provoked some critics as it occupies most of the neighborhood with its 15, 000 daily vehicles and the flow of "black market" employees. It is located between the central areas (organized around Avenida Paulista and Avenida Faria Lima) with high incomes housing and the peripheral ring suffering from the lack of infrastructures and efficient public transports.

_

[&]quot;quando eu nasci, moravamos numa casa enorme e alugada, antiga sede de fazenda, com um terreno enorme também. tinhamos, no meio da cidade, uma casa com cahorro, pato, galinha"

Picture 1: The verticalization of Vila Leopoldina



Source: Picture taken by the author in June 2012 in Vila Leopoldina from a Metro station

4.2.2.2 The Colonia Roma: An artist neighborhood in gentrification

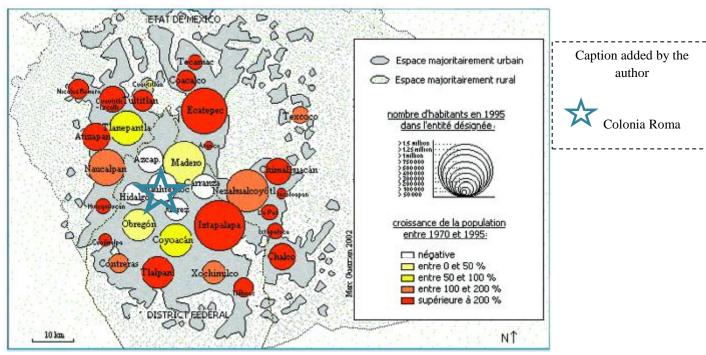
The Colonia Roma Norte in Mexico City belongs to the historical part of the city and is part of the Cuautehmoc Delegation. The urban setting of Mexico City today is largely dependent on the earthquake of 1985 (R.Charvel, 2012). It accentuated a movement observed since 1970s of disaffection of the central historical zones because of criminality and pollution, disaffection visible in the deterioration of the buildings and their surroundings. The emergence of "satellite neighborhoods" (such as the modern area of Santa Fe) is displacing many economic activities into islands of urban development where high-income families settle. This trend mainly concerns the South-west part of the city (Guerrien, 2004).

Since the 1990s however, local governments have launched several plans in order to address the needs of the central neighborhood and preserve the numerous historical landmarks. The Cuautehmoc Delegation represents 40% of cultural assets of the Federal District. The *Programa de Rescate (the Rescue program)* is meant to rehabilitate the historical center of the Mexico City that has progressively been abandoned by higher and middle class residents. The program, launched in 2001, intends to revitalize the economic activities of the center, attract more residents and in general seeks to revive the feeling of security in this area.

Roma Norte, considered an artist neighborhood due to its buoying cultural life (galleries, design stores and independent designers, restaurants and open-air markets) is also undergoing an economic revival (picture 2). The inauguration of *Metrobus* line in 2005 and the public-

private partnership to implement bikes, Ecobici, in 2010 in the central areas, have contributed to revive the neighborhood (see picture 3). Early 2013, a cultural space will provide spaces for innovative entrepreneurs to become "the largest space dedicated to social innovation in the world" according to Julio Salazar, the coordinator of the project.

<u>Figure 4:</u> Demographic growth by neighborhood (*Colonia*) in Mexico City (1970-1995), the disaffection of the center



<u>Source</u>: Guerrien, M. (2004). Transformation et fragmentation des espaces urbains. Le cas de la zone métropolitaine du bassin de Mexico. *L'espace géographique*. 33: 336-352 Belin

Picture 2: Roma Norte and its various recreational activities

The neighborhood is characterized by its small and original stores and is vibrant nightlife





Source: Pictures taken by the author in November 2012, Mexico City

Picture 3: Public transportation in Roma Norte, Mexico City

The public bike system, Ecobici, is rapidly expanding in many different neighborhoods of the city and the metrobus line, which line drives along a main artery, Avenida Insurgente, stops in Roma Norte





Source: Picture taken by the author in November 2012 and http://johnsmitchell.photoshelter.com/image/I00008aP5M5oOTUA

4.3 Research method design and data collection

The research design provides a pathway from the initial research question to the tangible proves and instruments that will lead to the final results (Yin, 2008). The "triangulation" defined as "the combination of methods" (Denzin, 1978 in Jonsen & Jehn 2009) helps to avoid personal interpretations. Since the case study is construed as qualitative research, it encloses essential literature —both theories and empirical readings on the context - field and direct observations, individual interviews. In essence, the definition of the case study implies the necessity to browse a variety of sources of evidence in order to enlighten the decision-making process of the entrepreneurs.

The role of theory in the case study process is important as to help build your own direction, based on existing research (Sutton & Staw, 1995). The existing theories help in "defining the appropriate research design and data collection" (Yin, 2008) but must, in the end, apply to extend the knowledge.

Once the geographic area has been delimited, the research process consists in finding and interviewing the key actors. As the research process must be "replicated" (Yin, 2008) from one case to another, this research looked for similar sources of data.

First, key institutions, Endeavor and VC managers, have been contacted in both cities. Endeavor is a non-profit organization that promotes high-impact entrepreneurship, which it believes to transform emerging economies (Sahlman, 2009) by encouraging innovative ideas. Founded in the US in 1998, the organization has expanded around the world, opening offices in Mexico and Brazil among others. Endeavor builds a network of consultants and investors ("the mentors") around the entrepreneurs in order to help them professionalize and accelerate their growth potential.

Contacting Endeavor was useful in many regards. First, the presence of the organization in both cities guaranteed that the research could be supported by comparable quality of information. Endeavor provided this research with equal access to entrepreneurs as well as their broad database in both cities – between 80 and 100 entrepreneurs (Interview with Endeavor consultants, 2012). In Sao Paulo, Amisha Miller, *Policy and Research Manager*, and Luiz Manzano, *Search and Selection Manager* at Endeavor Brazil were determinant in drafting a comprehensive view of the entrepreneurial ecosystem in Sao Paulo and, in the end, helping me to identify the relevant neighborhood, Vila Leopoldina. In Mexico City, Alonso

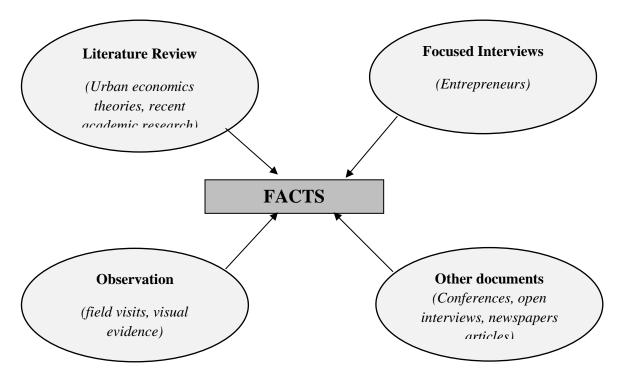
Navarro, a *Search and Selection* Manager, provided insights on dynamic neighborhoods for knowledge-based entrepreneurs.

Other informants working with Entrepreneurs, essentially on the finance side, were essential in providing context and empirical data. Their expertise was useful to corroborate my first source (Endeavor). In Sao Paulo, Rodrigo Baer runs Warehouse Investimentos (along with his co-founder Moises Herszenhorn), a VC firm established in Vila Leopoldina. They built shared offices in order for the incubated companies to benefit from the direct assistance from the investors as well as a range of services (accounting, legal service, etc). "Our mission is to make business happen" and Vila Leopoldina was convenient for the space, the good location and relatively cheaper rent (Interview, 2012). In Mexico City, Roberto Charvel, founder and managing partner at Vander Capital Partners, a direct investment fund performing investments in emerging markets and investor in Real estate in Mexico City, provided dense and relevant information about the mutations of the entrepreneurial ecosystem in the Mexican capital.

Case studies can be coupled with a field experiment. In this case, the investigator settled in both cities in order to fully exert her role of "participant-observer" (Jansen & Jehn, 2009). From this vantage point, the researcher was able to conduct interviews, gather visual evidence and proceed to observations. Direct observations were conducted during two extensive neighborhood visits in Vila Leopoldina, Sao Paulo and Roma, Mexico City. The visual evidence of existing infrastructures and leisure amenities were collected and reproduced here (see picture 2). Apart from the general urban planning of the neighborhood, the majority of the entrepreneurs' offices was visited to grasp the reality of the conditions and of the environment (see Annexes 9.2 and 9.3)

_

Figure 5: The combination of sources that support the facts



Source: Adaptation for this research by the author of "convergence of evidence" (Yin, 2008)

4.3.1 Search and selection of entrepreneurs

In this research, the unit of analysis is the individual entrepreneur. In order to gather a consistent body of interviewees, the following criteria have been followed: (i) Entrepreneurial ventures are selected to match the definition of knowledge-based entrepreneurs (see 2) and most specifically of the high-technology sector. Limiting the heterogeneity in the nature of the activity allows a better comparison as comparing young technology-based startups with industrial firms would undoubtedly lead to really different needs and therefore different variables. Also, (ii) entrepreneurs must be installed in the selected neighborhood for a maximum period of three years as this research is focused on a recent trend of decision-making, therefore before this period, the information is of decreasing relevance. Eligible entrepreneurs could have started their ventures before this time period but in another neighborhood and have moved their main offices in the last three years. The localization of the headquarters – and not a factory or other secondary offices – is regarded. Any type of offices within the chosen neighborhoods, from shared-offices to independent ones – are regarded as relevant.

One of the most important sources of evidence for a case study is the interview. The focused interviews (Merton, 1990) imitate guided conversations as the interviewer follows an

anticipated structure. As a case study differs from experiment (carried on laboratories for instance), the interviewer must adapt to the interviewee in order to capture answers in a real context (Yin, 2008). The "open interview" is the most efficient method to get access to the results. Without being passive, the interviewer must not be directive and must prefer flexibility in the prepared protocol. In order to respect this condition, the investigator will proceed to the interviews in the entrepreneurs' offices whenever it is possible.

Each interview lasted between 30 to 45 minutes. All Mexican entrepreneurs were interviewed at their office in the Colonia Roma in November 2012, as well as one Brazilian entrepreneur (Rennan Fortes, Payleven) at his office in Vila Leopoldina in July 2012. The remaining Brazilian entrepreneurs (iFood and TerraCycle) were interviewed through a Skype conference in November 2012 but the investigator had visited their offices at Warehouse Investimentos, Vila Leopoldina before. The interviews with the Brazilian entrepreneurs were carried in Portuguese while three out of fours interviews with the Mexican entrepreneurs were carried in English and the remaining one took place in Spanish. In total, seven founders or co-founders were interviewed, corresponding to seven distinct startups: Four Mexican entrepreneurs who work at Roma Norte and one seed capital fund and three Brazilian entrepreneurs who work at Vila Leopoldina. 100 % of the Mexican entrepreneurs are owners of a small enterprise with less than 10 full-time employees. Two out of three entrepreneurs in Sao Paulo had more than 20 employees while the remaining one had less than 10 full-time workers.

The interviews carried were not thought as relevant in a statistical perspective but were designed to underline the relations of the entrepreneur with its ecosystem and assess the importance – or irrelevance - of place in his decision-making process.

4.4 Criteria for interpretation of findings

The literature review on the subject is instrumental in formulating the questions for the interviews. Described as a first necessary step of the research in order to provide "sharper and more insightful questions about the topic" (Yin, 2008), Section 3 lead to the formulation of the unique format of the questionnaire (see Annexes 9.1).

The multiple-case study is justified by the means of comparison. When comparing two sets of cases, the logic underlying the choice of such a method is either to predict similar results or opposing conclusions. It is likely that the contrasted development of the two neighborhoods of the sample influences the perception of the place for entrepreneurs.

The Results (section 5) of this research will be organized as a cross-case analysis (Yin, 2008), according to explanatory topics that call a comparison between both neighborhoods and across the dozen entrepreneurs interviewed in order to uncover the salient traits of each ecosystem. The collection of evidence gathered through direct observation as well as during the interviews will be sporadically cited throughout the findings as the intent is not to portray each individual entrepreneur as a single case study. However, for the sake of clarity, brief information about each entrepreneur will be briefly exposed and further explored in Annexes 9.4 and 9.5.

4.4.1 Determinants leading to findings

In order to grasp the determinants that shape a neighborhood's attractiveness for entrepreneurs, the pre-existent ties of each individual entrepreneur to the neighborhood - if the entrepreneur previously lived in the neighborhood for instance – will be regarded. Also, the daily interactions between the entrepreneurs and their direct environment is selected as an indicator that the entrepreneur likes working in this neighborhood and if this specific environment contributes to a culture of openness and shared ideas, specific to optimal entrepreneurial ecosystem (Section 3).

Furthermore, in consideration of the neighborhood characteristics associated with the perceptions of entrepreneurs, will be analyzed the amenities that are relevant for a knowledge-based entrepreneurial venture including the easy access to the neighborhood (time from home to the work place) and the existence of public transportation, the availability of highly qualified human capital (proximity of major universities), the cost of rent, the contact with sources of financing and business mentors. Theories that promote the resource-based approach imply that a high degree of intentionality derive from entrepreneurs' decisions while other theories have pointed out the importance of the emotional attachment to the place.

5. Results

5.1 Analysis of the pool of entrepreneurs and their working environment

The results of the entrepreneurs' interviews and the field observation are presenting in the following in the objective of clarifying both ecosystems and their specificities.

5.1.1 Entrepreneurs' profiles

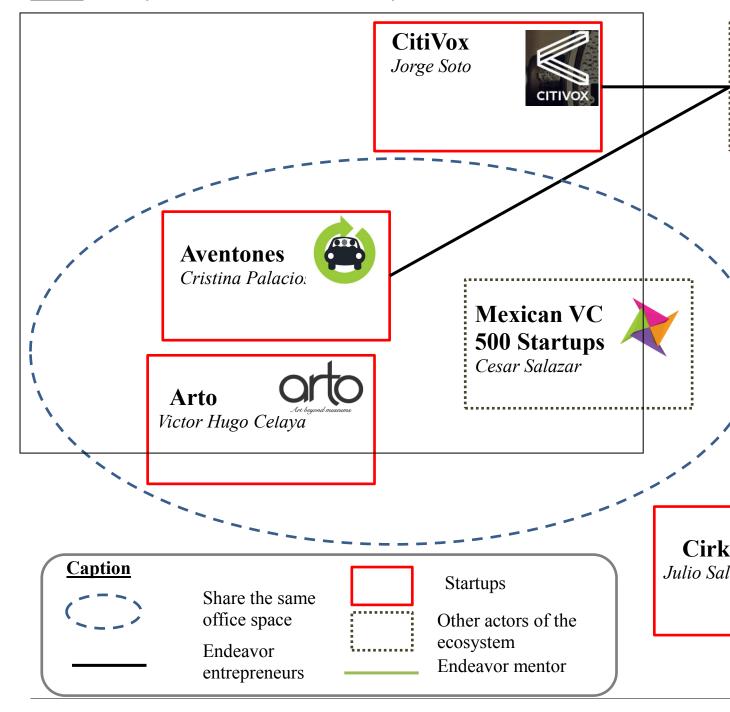
From the interviews, two main distinct profiles of entrepreneurs have emerged, although certain homogeneity is found within each ecosystem. The sample of Mexican entrepreneurs is almost negligibly younger than the Brazilian one; all Mexican entrepreneurs (interviewed) are under 30 years old with an average around 26-27 years old, while the Brazilian entrepreneurs' average age hovers around 30 years old. All entrepreneurs, regardless of the country, have an undergraduate or graduate diploma. The majority of Mexican entrepreneurs (three out of four) have become entrepreneurs right after finishing university (Cirklo & CitiVox), some as they were still students (Arto), but none appear more than two years after obtaining their diploma (Aventones). In Sao Paulo, only Renann Fortes (Payleven) has had previous experience as an entrepreneur and falls into the category of "serial entrepreneur", as he has been at the origin of several businesses. The founders of TerraCycle and iFood were previously employed in larger companies.

None of the entrepreneurs interviewed has grown up in the neighborhood-cluster studied, but the majority of the Brazilian entrepreneurs are from Sao Paulo. Mexican entrepreneurs generally display wider international experience than their Brazilian counterparts: The cofounder of Cirklo, Julio Salazar, holds a US undergraduate degree, while the co-founder of Aventones, Cristina Palacios, has lived in several countries while growing up. Finally, both the co-founders of CitiVox and Arto have spent extensive time in the US and Europe. However, the investors interviewed for this research share similar backgrounds: Rodrigo Baer (Sao Paulo) and Roberto Charvel (Mexico City) are both MBAs graduates at major Business School in the US. Only Cesar Salazar, co-founder at Mexican VC is a former 'serial entrepreneur'.

5.1.2 Organization and interactions within each ecosystem

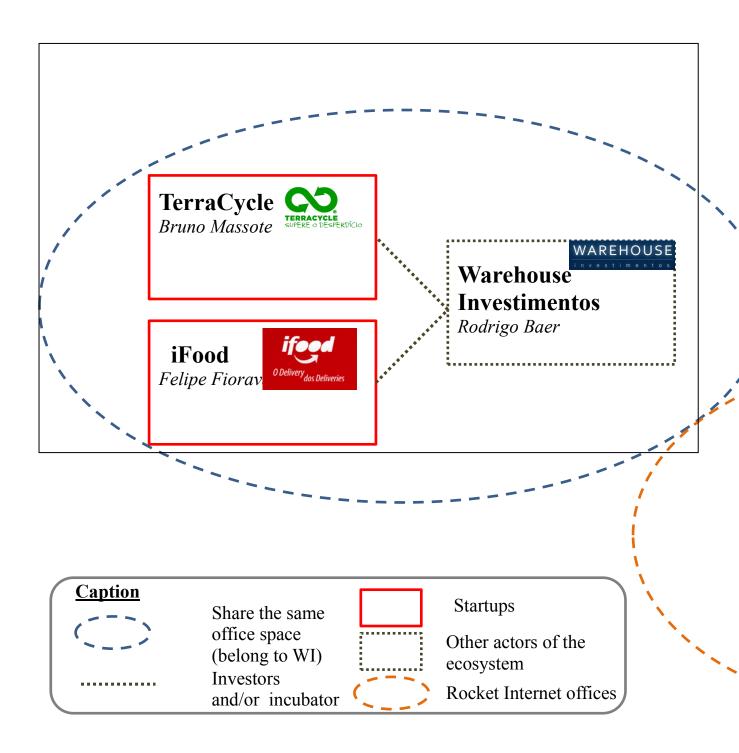
For the sake of clarity, the following figures intend to present the formal connections and relations between all of the persons interviewed, when there happens to be some. The profiles of each firm can be found in the annexes (see Annexes 9.4 and 9.5)

Figure 6: The ecosystem of the Colonia Roma, Mexico City (situation in November 2012)



In representing all the actors met and interviewed during the second phase of the research in Mexico City within a single figure, a primary observation arises: The entrepreneurs working in the Colonia Roma Norte are relatively well-connected to the wider ecosystem of Mexico City (see Figure 5) and even beyond the Mexican frontiers. First, two startups (Aventones and CitiVox) belong to the community of Endeavor entrepreneurs, which means that they are labeled as "high impact entrepreneurs" and serve as examples for the Mexican entrepreneurial ecosystem. Then, Mexican VC, whose founding team is composed of 50% Mexican and 50% American investors, has merged in the summer of 2012 with 500 Startups, "the most active seed capital fund in the world" (Cesar Salazar) and is based in San Francisco's area. Through Mexican VC, the neighborhood of Roma Norte and its entrepreneurs have an open window to an international network of actors in the entrepreneurship field. In fact, Aventones and Arto are sharing their offices with Mexican VC, although they are not receiving investments from the VC. Cirklo is presented in this figure as being geographically close to the shared-office of Aventones-Arto-Mexican VC, because the team has opened its first offices in the same street and regularly spends time with their fellow neighbors/entrepreneurs. While doing research in Mexico City and after a month in the field (without previous acquaintance with the city), the researcher was able to benefit from the fluidity and rapidity of the informational flows between all the actors represented, which allowed the field research (including the interviews) to be carried out in a month and half.

Figure 7: The ecosystem of Vila Leopoldina, Sao Paulo (situation in November 2012)



Due to the significant size of the neighborhood of Vila Leopoldina, the offices of the entrepreneurs are not as close geographically (separated by 3 km) as the Mexican entrepreneurs (less than 1,5 km). Each of the two institutions, Warehouse Investimentos and Rocket Internet, occupies a different part of the neighborhood and no contact—or relatively small-exists between the entities, although some employees are acquainted. Here represented in the bubble, the two VC and their respective "incubated" startups function as isolated islands in a neighborhood. Both Warehouse Investimentos and Rocket Internet benefit from

large and functional spaces that were renovated in order to host several young startups leaving extra space in order to expand more in the future. The surroundings of each office building have kept their industrial features (section 4.2.2.1). This makes it difficult to contribute to the development of spontaneous meetings and informal gatherings, as very few places are accessible to pedestrians. Endeavor in Sao Paulo has no entrepreneurs in its pool that worked in Vila Leopoldina at the time of the research in June 2012.

5.2 The main factors of decision

When considering a neighborhood for their operations, entrepreneurs scrutinize the general setting along with its specific features as they search for the optimal combination of attributes that can support their specific activity and the expected results. Following the resource-based approach (section 3.2) for this research, the neighborhood's structure has been deconstructed into five categories: Transportation (accessibility), culture (presence of urban amenities and of a vernacular culture), human capital (networking and interactions among peers), feeling of security. The following table 4 synthesizes the responses and lists the factors according to their degree of priority for each pool of entrepreneurs. Each category is further explored in the subsequent paragraphs of this chapter in order to highlight the complexity and discrepancies within each pool of entrepreneurs. The mapping of the urban amenities represented in Figure 7 and Figure 8 intend to exemplify the entrepreneurs' perceptions of their neighborhood.

Table 4: Summary of results

Factors	Mexican entrepreneurs	Brazilian entrepreneurs
Public Transportation	✓	✓
Feeling of security	_	_
Costs (rental)	-	✓
Attraction of high-qualified human capital	✓	✓
Proximity to financial capital	×	✓
Network and informal contacts	✓	×
Neighborhood's atmosphere and identity	✓	×

Caption:

✓ Priority

— Neutral

★ Disregarded

5.2.1 The accessibility of the office place through public transportation: A priority

All entrepreneurs were concerned with the accessibility of the work place through public transportation. In Brazil, both work offices in the sample are in walking distance from the metro which allows employees to rapidly meet the central areas. Also, the Marginal Pinheiros (a main transit artery) permits easy access to the area and potentially to the warehouses located outside of Sao Paulo when the activity requires it. However, the majority of the entrepreneurs was using his or her own car and would drive between thirty minutes to one hour between their home and their office. Compared to other areas, main arteries at Vila Leopoldina do not get as congested with traffic jams as more traditional business areas (Vila Olimpia, Morumbi, Itaim Bibi). These previous aspects have been listed as very positive by the entrepreneurs as all mentioned that proximity to public transportation is an important prerequisite in order to be able to recruit employees as their venture was developing. One entrepreneur mentioned that they had dismissed another neighborhood (Alphaville) for its lack of proximity or access to public transportation, as this would make it impossible to recruit employees, especially young graduates.

Mexican entrepreneurs were equally assertive on the importance of the proximity to public transportation, although a majority of them lives within walking distance (between ten and twenty min) in the neighborhood of their offices or in a nearby one. Using bikes - made possible through the public system of bikes, EcoBici - to come to the office is common practice among the entrepreneurs, which is an indicator that entrepreneurs chose the Colonia Roma Norte for its better quality of life.

Mexico City and Sao Paulo are affected by their endemic lack of public transportation, being further problematic as peripheries keep sprawling outward. Entrepreneurs in both neighborhoods try to rationalize their location according to this parameter. Both areas are relatively well connected to the rest of the city compared to other comparable neighborhoods.

5.2.2 The issue of security

The attachment of the entrepreneurs towards the neighborhood is closely related to their feeling of security. Part of the disaffection of the entrepreneurs for Vila Leopoldina is due to the lack of security; several assaults were reported around the offices of Rocket Internet as they share a surrounding wall with a *favela* (see Picture 4). The co-founder of Payleven reports that no one walks outside of the secure walls surrounding the condominiums of the offices, and employees use their cars during lunch break. The other entrepreneurs in Sao

Paulo report similar problems as the streets are dark at night and there are very few pedestrians. Despite the rapid changes that the neighborhood is undergoing, entrepreneurs are still witnessing a tension between "pockets" of modern offices and poor housing (*favelas*). This tension was palpable as the investigator was conducting the field research: While walking for three to four hours in the neighborhood, the investigator's presence was clearly identified as a stranger by the few pedestrians, while the same feeling was never noticeable in more central areas of the city. Nevertheless, this problem was not decisive in the decision of the location and most entrepreneurs are confident that the issue of security will improve in near future.

Picture 4: The wall separated the corporate offices to a favela, Vila Leopoldina



Source: Photo taken by the author, in June 2012 from the Rocket Internet offices in Vila Leopoldina

In the Colonia Roma, a majority of entrepreneurs feel comfortable walking during the day and night to their home, and the neighborhood is a preferred place for social life after work, especially for its nightlife activities: A plethora of bars and restaurants attracts the youth of Mexico City. Although two female entrepreneurs have reported that they do not walk alone to their cars at night, they also acknowledged that they are feeling progressively safer and that security was an essential element in the location choice for them. The first office of Aventones entrepreneur was located in an unfriendly and unsafe neighborhood; the team decided to change despite the free rent they benefited as they would mainly work from home with the induce lack of communication between the members of the team.

5.2.3. Rationalizing the costs: Are they irrelevant?

Entrepreneurs, more than established firms, are on tight budgets as the average time to generate profits can take months or years. Therefore, traditional business areas are often too expensive for young firms (if they do not launch their venture from a university incubator). In Sao Paulo, costs are closely associated with the need of large space ¹⁵ as the firms were rapidly growing; Vila Leopoldina was, in none of the cases, the neighborhood of the initial offices but rather the neighborhood of growth phase enterprises. An entrepreneur estimates that the difference of rental costs is about five times higher in central areas such as Itaim Bibi. A comparison of rental price of offices between Vila Leopoldina and other business areas show a difference of 75% in favor of Vila Leopoldina (see table 5). Considering that more and more employees would be recruited, the choice of a neighborhood that would offer cheaper meal options was also valued. However, entrepreneurs perceive a general lack of choice when it comes to meal options that are easily accessible by foot. To compensate for the scarcity of options, all three firms cover part of the cost by providing a food stipend to their employees (covering up to 80% of the lunch costs) (Interview, November 2012).

According to all interviewees, costs are not the motive behind the shared-office spaces. In Sao Paulo, the structure offered by the VC provides "ready-to-use" services such as accounting and legal services that allow focusing on the core of the business. In Mexico, as well as in Rocket Internet Brazil, the possibility to share best practices and learn from the know-how of more experienced startups is the main driver. An entrepreneur refers to the extreme focus on costs as an "overrated" practice (interview, November 2012). Instead of exclusively representing a cost-effective solution, shared office space emerges as an advantageous opportunity to be in close proximity to peers, especially considering the long hours dedicated to building the new venture. One entrepreneur in Brazil even admits that their current situation is not the cheapest solution that exists in the neighborhood.

A comparison of the rental prices by neighborhood in Sao Paulo and Mexico City, in table 5 and table 6, show that the new areas of development remain remarkably cheaper than the common commercial areas, by 75% in Sao Paulo and in the same observed proportions in Mexico City.

_

¹⁵ The notion of « large space » if it has been mentioned by all of three entrepreneurs cover differences in terms of scales: Payleven is one of the 12 companies incubated inside Rocket Internet, therefore, they share their offices with some 400 employees while the need of space for TerraCycle was determined by the desire to create a showroom of their products and be able to receive their clients (large corporations) at their office

Table 5: Average rental prices for offices in Sao Paulo, by neighborhood

	Alphaville	Itaim Bibi	Vila Olimpia 🚺	Vila Leopoldina		
Price by square meter (USD)	26,9	36,3	35,9	20,7	-	75%
Source: the author based on data by	y vivareal.net			Î	l	

Table 6: Average rental prices for offices in Mexico City, by neighborhood

	Polanco	Santa Fe	Condesa	Roma Norte)	
Price by square meter (USD)	21,2	24,6	12,6	12,8	-	75 %
Source: the author based on data fro	m inmomexico.co	om		\uparrow		

5.2.4 Attracting high-qualified human capital

Vila Leopoldina, because of its peripheral location, is ideally set near the University of Sao Paulo, ¹⁶ where it is possible to recruit high-qualified interns, especially because the Brazilian system encourages students to acquire long and continuous professional experience before graduating. As the fast-growing incubator of Rocket Internet is primarily involved with new technology ventures, the choice of the neighborhood is influenced by the need to attract young and qualified professionals. While proximity and accessibility is certainly a condition to recruit talent, the authenticity or atmosphere of the neighborhood is never reported as being a determinant.

In the Colonia Roma Norte, the majority of entrepreneurs indicate that they had been were previously connected to the people they recruited. One founder notes: "We thought it was lame practices {to be previously acquainted to the person}, that it didn't happen anymore, but actually we realized it *did* add a higher value". All the founding teams are composed of family members, friends and people from the entrepreneurial ecosystem that already know each other. Remarkably, the dynamic environment of the neighborhood is closely associated to the capacity to attract new talent. The regained centrality of the neighborhood as a place of cultural events and vibrant nightlife is definitely an argument advanced by entrepreneurs. Some of the most prestigious universities in Mexico City are located in "satellite" modern neighborhoods such as Santa Fe, but the size of the startups interviewed did not require hiring a lot of interns.

considered as one of the best university in Brazil and some of its departments are very prestigious such as the Polytechnic School.

The University of Sao Paulo, USP, is one of the three state University of the state of Sao Paulo. The USP is

5.2.5 The proximity to financial capital

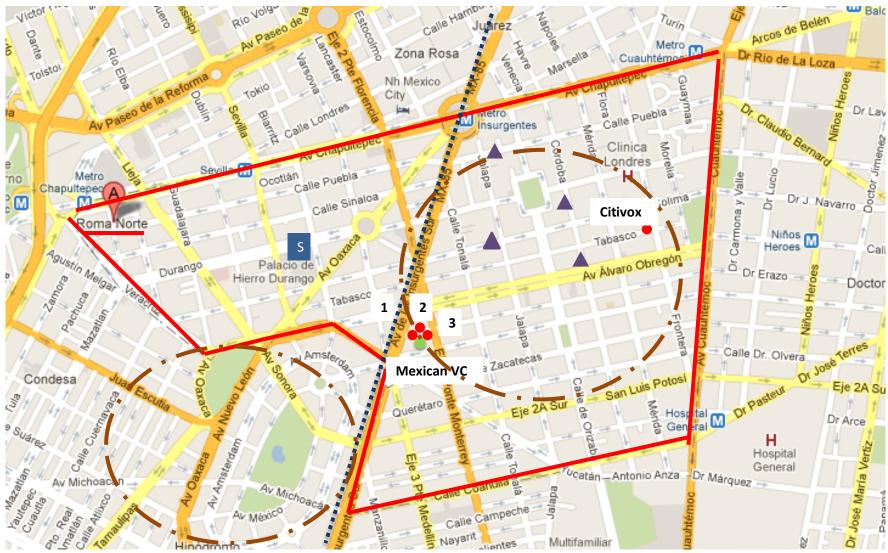
As the majority of the Mexican entrepreneurs rely on founders' money and therefore, they did not express the need to have easy access to external sources of financing. Their model of development put emphasis on generating income through its activity rather than depending on leveraging alternative sources of financing. Brazilian entrepreneurs are, on the contrary, following their investors and are geographically settled in the same offices than them. The Brazilian startups have experienced higher rates of growth than the Mexicans in general.

5.2.6 The network and informal contacts

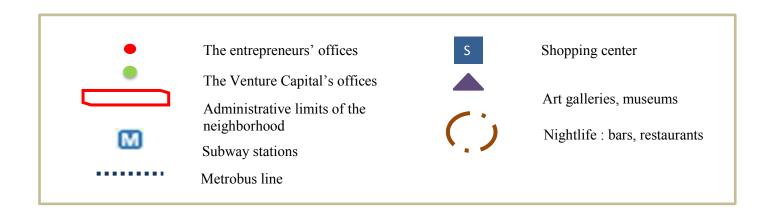
Inside the micro entrepreneurial ecosystem of la Colonia Roma Norte, the relations among entrepreneurs are tight and often based on friendship. One of the founders of a startup accelerator notes that "this working place was found by a friend and he invited other friends to come share this space" (interview, November 2012). As previously said, all startups are composed of already connected people. The physical proximity of the startups' offices reinforces the bonds among entrepreneurs through informal contacts. After working for several months in cafés, the founders of Cirklo chose their first office on the same street as the shared-office space studied and they also share a space with another startup. The choice of the office location was driven by the desire to revive the experience of impromptu meetings with their peers that they had experienced at the initial steps of their venture.

Also observed is the pivotal role of some more experienced entrepreneurs that are assisting the new ventures through advice and the provision of access to services or rentals. None of these relations are codified, but arise spontaneously. For instance, Aventones – the carpooling company's first offices were lent to them for free by another entrepreneur (interview, November 2012). The culture of mutual aid is apparent among the entrepreneurs while in Brazil, the relationships are more contractual and codified. "There is a desire to interact more," but "most of the communication is through emails" (interview, November 2012) notes one entrepreneur in Sao Paulo. The Brazilian VC assists the firms in which they invest, pushing them to become more professionalized while Mexican VC refuses to endorse the traditional role of investors and claims to base its relationship uniquely on mutual commitment: "Trust allows us to do very crazy stuff" (interview, November 2012). The investors play the role of mentors and offer their technical assistance whenever it is needed.

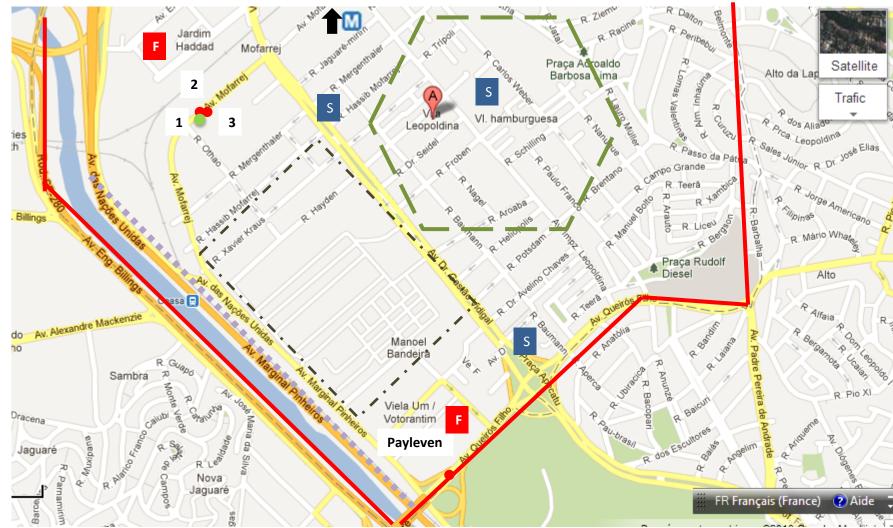
<u>Figure 8</u>: Representation of the Colonia Roma Norte's main urban amenities



- 1 Cirklo
- 2 Arto
- 3 Aventones







- 1 Warehouse Investimentos (VC)
- 2 TerraCycle
- 3 ifood

•	The entrepreneurs' offices The Venture Capital's offices	Residential area
M	Administrative limits of the neighborhood Subway stations	Favela – Brazilian shanty town
<u> </u>	City Train – CPTM Express way - main access road (Marginal Pinheiros)	Shopping center
[7.3	CEAGESP – Sao Paulo's largest open-air market for primary goods	

5.3 The symbolic value of place

Despite the international mobility and increasing connections with a large variety of actors in different places of the world, entrepreneurs still expressed the importance of "feeling good" about the place they are settling in. The physical environment – the feel and look of the neighborhood – triggers the entrepreneurs' actions towards the ecosystem.

5.3.1 The "territorial dimension" (Pitelis, 2012) still relevant

The decision to launch a new venture is, in time, often closely intertwined with the choice of the location. The substantial literature review on the subject has revealed that the "territorial dimension" (Pitelis, 2012) of the firm is the result of an audit of the resources essential to the future performance of the firm and the perceived – or imagined – vision that the founding team has formulated towards a specific region. During the interviews, all entrepreneurs expressed an opinion if not strong feelings towards their working environment. Whether the entrepreneurs had consciously chosen the neighborhood in which they would open offices (the Mexican entrepreneurs in the Colonia Roma) or whether they responded to a business opportunity and therefore, would not have the control over the choice of the location (the Brazilian entrepreneurs in Vila Leopoldina in this research), only one entrepreneur out of seven expressed a certain neutrality towards the neighborhood.

5.3.2 A contrasted discourse: Choice versus opportunity

The pool of Mexican entrepreneurs was unanimously enthusiastic about the Colonia Roma Norte. The laudatory terms – "young", "dynamic", "vibrant" - used to describe the vernacular culture of the neighborhood revealed a real affective attachment to the place. The identity of the neighborhood resonated vividly for them, which ultimately created a sense of place, identified by Carr & Servon as the preservation of the local assets an area. Roma Norte seems to constitute a real source of inspiration for Mexican entrepreneurs ("the neighborhood is a mixture of historical buildings with amazing architecture and a new generation" (interview, November 2012)), while Brazilian entrepreneurs would speak about Vila Leopoldina in terms of "economic development" and "rehabilitation" (interviews, November 2012) rather than in terms of identity or vernacular culture. The attractiveness of Vila Leopoldina lays on a rational balance of the advantages and the disadvantages in terms of business opportunities rather than on unique attributes. The interviewees differ in their assessment of the decision they made to settle or move their ventures to Roma Norte/ Vila Leopoldina. Contrary to

Brazilian entrepreneurs, the Mexican entrepreneurs would always mention the "young", "less mainstream", and "open" character of the Colonia Roma.

Among the interviewees, all but one gave real importance to their office space. In both neighborhoods, entrepreneurs were concerned in creating a space comfortable to work in and one which could strengthen their corporate image. All the Mexican entrepreneurs dedicated some time to the setting of their offices, opening collective spaces for instance or working the weekend on some design improvements. In the case of the shared-office between Mexican VC, Aventones and Arto (and the remaining startups), the choice of design-décor was left to street artists (see Annexes 9.3). The office serves as a communication tool in order to "bring people from the outside" (interview, November 2012), that is to say, attract more entrepreneurs. Vila Leopoldina's offices were never the initial offices of the firms and in the case of TerraCycle and iFood, they moved to the modern glassed space and "ready-to-use" offices of Warehouse Investimentos (see Annexes 9.2).

The appropriation process of the working space was therefore very different; all Mexican entrepreneurs and Payleven in Brazil put more emphasis on the importance of "creating" and "building" the space for themselves as part of the entrepreneurial process, while the firms in the warehouse considered their office as a great showcase for their company and for their clients. For all three entrepreneurs, Vila Leopoldina was not the location of their first office but the rapid growth of the firm in the first year – or two years – prompted the entrepreneurs to leave their first offices originally in more central neighborhoods (Vila Madalena and Vila Olimpia) for peripheral neighborhoods to take advantage of larger spaces. The offices in Roma Norte appear as more integrated into their direct surroundings: "Our clients like to come see the neighborhood" (Aventones, 2012), and the exterior façade of the office was painted in bright colors "to indicate that something is happening here" (interview, November 2012) (see Annexes 9.3)

5.3.3 The inspiration and reputational value of the neighborhood

The results from the interviews with the four Mexican entrepreneurs echo the research about creative clusters, which convincingly concluded the intangible, yet positive effect of the local environment on creative activities (Heebels & Van Aaslt, 2010). Indeed, the perception that the Mexican entrepreneurs conceive about the Colonia Roma recalls the expression of "something in the air" coined by Marshall. In fact, a review of newspaper articles reveals that

the neighborhood knows along with other historical *Colonia*, a trend of gentrification which allows to conclude to a rapid reformulation of the neighborhood's main activities.

The entrepreneurs have established social ties, defined as the personal and daily interactions of the entrepreneurs and its local environment. Many of them affirm working in cafés for some hours and meetings often happen outside the offices (interview, November 2012). The impression of "village" or "community" resonates the singular attachment of the entrepreneurs. From discussions with the entrepreneurs emerged the identity of a lively and constantly changing neighborhood ("young", "intellectual", "fast", "open-minded", "authentic"). Aware of the ongoing gentrification, they also perceive the numerous opportunities that the unexplored part of the neighborhood represents.

The Colonia Roma crystallizes a deeper attraction also for its architectural magnificence that is being rediscovered. Entrepreneurs find the environment in line with their own values of experimentation, tolerance and openness. The reference to the Silicon Valley as a model revolves around the culture of openness, open data and sharing of ideas of the American ecosystem. Most people interviewed are proactive in promoting the entrepreneurial culture in Mexico City: they regularly meet at networking events or act as advisors during startup competitions.

This global vision and consciousness of the neighborhood's particularities is not shared among entrepreneurs in Vila Leopoldina. Contrary to their Mexican peers, the pool of Brazilian entrepreneurs never mentioned to be aware of the existence of other startups in the neighborhood. Because of the mainly industrial landscape and lack of security, few of them walk in the neighborhood or have established local contacts. Several Brazilian entrepreneurs mentioned the inconvenience that the neighborhood represents in terms of leisure and social activities such as a restaurant and bar options that were available in the previous neighborhood, where they had started their venture.

The case studies based on interviews show that the final decision of entrepreneurs to settle in a particular area is the product of a combination of rational thinking and intuitive decision. Brazilian entrepreneurs underline their need for a higher degree of professionalization and resources such as the availability of qualified employees as well as the accessibility of the office place to public transportation. Despite their discourse based on sensible arguments for the venture's development, most of the Brazilian entrepreneurs regret the lack of informal contacts with their peers as well as the scarcity of leisure places easily accessible by foot. The

Mexican entrepreneurs have displayed their attachment to the neighborhood as a "land of possibility" where creativity is encouraged and regular contacts with their peers are essential. Often cited in studies on Silicon Valley, the presence of highly successful entrepreneurs within the region or the expectation of high profits was never mentioned by the entrepreneurs in Mexico City or Sao Paulo.

6. Discussion of findings

This research demonstrates significant differences among entrepreneurs in the relations they establish with their local environment. It also exemplifies that the decision to move and settle in certain locations affect the opportunities, the development of the business venture as well as the quality of life of its founders. Compared to other highly structured ecosystems (mainly the Silicon Valley in California or the high tech valley in Israel), the Colonia Roma Norte and Vila Leopoldina do not display a strongly integrated web of actors even if they share some of the traits that characterize more established entrepreneurial areas. In the Colonia Roma Norte, entrepreneurs engage with the urban amenities of the neighborhood, which are in line with the culture of openness and the experience of collaboration alongside their peers. Entrepreneurs in Vila Leopoldina (Sao Paulo) are driven by the presence of solid structure offered by a higher degree of institutionalization.

6.1 Entrepreneurs' relations to the neighborhood and its urban structures in conjunction with their needs

According to the results previously discussed, entrepreneurs base their geographic choice on specific grounds and distinct feelings. The multiple necessities that are part of a firm's development tend to orient how the entrepreneur interprets "place."

6.1.1 The importance of the neighborhood according to the company's stage of development

Once the ventures are more established, leaving the initial phase of launching – as it was the case for the Brazilian firms in the sample – entrepreneurs become less and less dependent on networks embedded within the neighborhood. They tend to progressively replace the informal contacts established throughout the experimental phase with more institutionalized relations enforced through contracts (such as the relations with a VC for instance). This is confirmed by the results (see 5.3.2) where Brazilian entrepreneurs' choice is determined by an opportunity, of moving to a new place following an agreement with a VC.

The same observation holds true for two of the Mexican entrepreneurs that are currently in the process of negotiating with financial institutions. The VC's investment attests to a certain level of maturity of the firm, and in both cases, the entrepreneurs prove to be self-supported in terms of networking (one of them is opening a second office in NYC). This finding falls in line with the research about creative clusters in Berlin (Heebels & van Aalst, 2010) where

entrepreneurs rely less on their peers than on an outside network as they develop their venture: The 'local' dimension is not as much a prevalent need for the entrepreneur. As a result, the entrepreneur's degree of socialization with his or her peers has more to do with his or her own initiative than on his or her business obligations.

Rationalizing the costs or making the office accessible to public transportation become more of a priority as the firm grows. In the sample, Brazilian firms are larger on average—approximately 20 employees - than Mexican startups, which employ on average five people. Once the firm enters the growth stage, entrepreneurs have to tackle more practical questions such as attracting highly qualified employees, therefore the location does not only depend on the founders' preferences in terms of neighborhood. As mentioned in the literature, the development of high-tech startups requires the skills of highly qualified employees; therefore, a convenient location such as being accessible and within proximity of universities becomes an imperative. Furthermore, the pursuit of a corporate image, visible through the office environment, supplants the original desire for an authentic entrepreneurial experience with self-made and self-appropriated offices.

The initial phase of 'launching' a new venture requires (and even validates) more time allotted to experimentation, to engage in informal discussion with peers, and learn from their best practices, while the growth phase gives priority to practical issues. The nature of the learning process is directly influenced by the stage of development, which in return, impacts the interactions of the entrepreneur with his environment. The subsequent findings echo Duranton and Puga's (2001) analysis on *nursery cities*. The beginning of a business venture, according to the specific set of needs they require, ideally seeks a diverse and open environment to validate the business model and sharpen the learning process.

6.1.2 The relation to the neighborhood according to the nature of the activity and the status of the firm

In Vila Leopoldina (Sao Paulo), two out of three entrepreneurs have a "hybrid status": They are entrepreneurs and, at the same time, they are employed by a larger structure such as an accelerator of startups (Rocket Internet in the present case). One would refer to this situation as "light entrepreneurship" as the risk assumed by the entrepreneur is lower than in traditional ventures. As the idea has already been experimented in other markets, the execution is the aspect entrepreneurs need to focus on. Their status does not necessarily affect them in terms

of workload (although they still consider themselves entrepreneurs), but it does have an impact in terms of the choice of localization, a decision that is often not for them to make.

As in the previous argument (6.1), these entrepreneurs have more contacts with networks outside their location (sometimes in another country) than within their local peer environment. This led an entrepreneur of the shared office (Warehouse Investimentos) to comment that "everyone is really individualized" (Interview, November 2012). The spatial disposition of the startups within the neighborhood, in isolated microcosms, accentuates the insularity of each startup.

On the contrary, the Mexican entrepreneurs, who were all creating a venture that did not exist yet in the Mexican market, found that the local network of actors was instrumental in order to test the idea. "There is a fluid boundary between work-time and playtime," as Neff et al (2005) observed in these neighborhoods where spontaneous discussions arise and creative thinking is given priority over efficiency-driven actions. ¹⁷ The network of cafés, bars and more generally of social spaces are very often quoted as preferred places of formal/informal meetings and spontaneous gatherings but also as a marker of a dynamic and young neighborhood where something "new" and "innovative" is happening. These places are valued for being sources of entertainment beyond the office space. Entrepreneurs in their early-stage have the sensation of being in line with their environment, which reinforces their stance towards risk-taking and creative activity.

6.2 The sense of community among entrepreneurs : A catalyst for an expanding ecosystem

6.2.1 "Roma Valley", a spontaneous phenomenon

The neighborhood's vernacular culture is often depicted in its physical makeup: Large warehouses, art galleries, street art and corner shops distinguish the Roma Norte from other parts of the city. Entrepreneurs confer a real value on the neighborhood's local culture that they associate with the openness and creativity, which they believe are essential characteristics of the entrepreneurial experience. Not only did one entrepreneur nickname the neighborhood "Roma Valley," but they also display a strong connection to the "community" of entrepreneurs in the city. In organizing events and making themselves "visible," entrepreneurs are contributing in exchange to reinforce the personality of the place. They

¹

¹⁷ The investigator is aware that both the idea and the execution are complementary. In this argument, the difference is merely a question of degree and not considered absolutely.

intend to propagate the risk-taking feel and vitality of the neighborhood, even beyond the limits of the area.

The proximity with their peers is undeniably the main decision driver before the existence of organized institutions. The feeling of "being part of it" encourages the entrepreneurs to pursue a higher degree of collaboration. These pre-established social connections are instrumental in leveraging the relevant expertise and resources as Stuart & Sorenson (2003) pointed out. The projected reputation of a place tends be to self-supporting (Sorenson & Audia, 2000) as more aspiring entrepreneurs will assume that this particular area is flourishing in business opportunities.

The neighborhood appears as a land of opportunity in itself. The initiatives taken by the Mexican entrepreneurs (see 5) are contributing to the expanding culture of entrepreneurship in the neighborhood. As Babson College's insights on entrepreneurship emphasize, the cultural aspects in the constitution of an ecosystem are directly in line with its capacity to attract aspiring entrepreneurs and contribute to the growth of this ecosystem.

6.2.2 Intertwined private and working life

According to Dahl and Sorenson (2009), entrepreneurs tend to choose their geographic localization to be accommodate their private life – being close to friends and family or being in a place in which they feel good - has an important weight in their decision.

As previously mentioned, the majority of the Mexican entrepreneurs and their business partners/employees live in the same perimeter as their office. Mexican entrepreneurs have a close relation to the neighborhood in which they work, a relation that goes beyond a mere calculation of costs and advantages for their venture. The time dedicated to work is often closely intertwined with the time reserved for their private lives; the entrepreneurs' interactions with the Colonia Roma is not restricted to work, as they also experience it at nighttime with friends as a part of leisure activity. The urban recreational properties of the neighborhood and the liberal culture are attracting creative new companies, the same way San Francisco is, in a much larger proportion, home to many technology-based firms (Section 3).

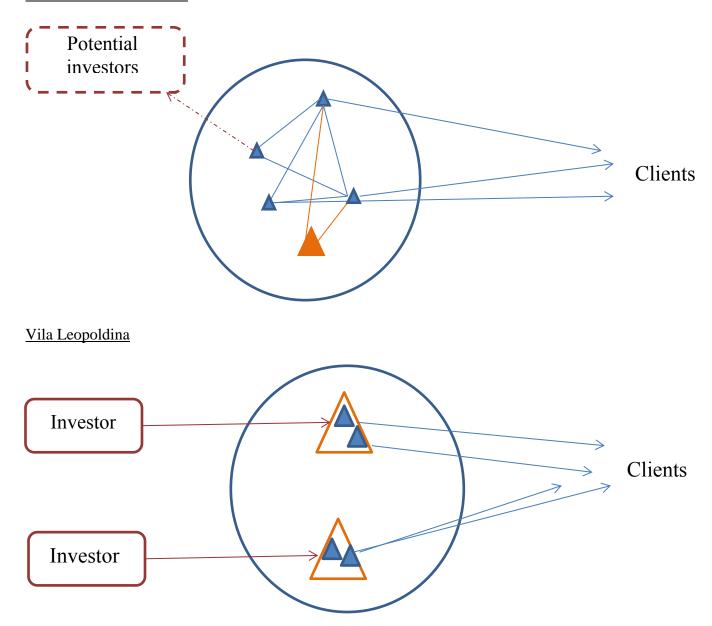
The image of the neighborhood of being a place revitalized by young people bringing together cultural and recreational activities instigates a movement of gentrification. Nevertheless, young entrepreneurs still benefit from low real estate prices, compared to comparable neighborhoods where businesses are established.

6.3 Two distinct models of ecosystem

The "stickiness" of certain places (Markusen, 1996) refers to their ability to sustain the economic activity and keep attracting labor and capital. Markusen's framework is designed to represent the different industrial districts and illustrate their organizational traits, based on the "firm size, [their] interconnections and [their] internal versus external orientations" (Markusen, 1996). In an attempt to represent the key elements that distinguish both ecosystems, the author proposes an adaptation of Markusen's model to entrepreneurial firms. The schematization of both ecosystems is presented as follows:

Figure 10: The schematization of both ecosystems according to Markusen's model

The Colonia Roma Norte



Source: The author, based on Markusen framework

The results in Mexico City show that the theories reasserting the ongoing search for spatial proximity - agglomeration of firms – remain relevant. The process of firm concentration is in this neighborhood the result of a conscious decision based on the expectations in terms of business opportunities that the entrepreneurs formulate. Furthermore, the urban setting of the area in question encourages the emergence of a sense of community as the neighborhood is integrated and easily connects all places. Entrepreneurs are leading small-independent firms and count on close collaboration with their peers, represented in figure 9. The role of mentors is assumed by early-stage incubators/accelerators which are themselves promoting the

underlying spirit of high tech ventures at its inception. After all, they too are a young generation passionate about programming, positioning themselves outside the traditional codes of formality imposed in the business world. The neighborhood's entrepreneurial activity allows itself to be compared with the beginnings of the Silicon Valley as the Valley's capacity to attract new businesses was primarily based on its openness and its culture of sharing data and fluid communication (Saxenian, 1990, 1994).

Nevertheless, Mexican entrepreneurs are not fully "embedded locally." Mexican entrepreneurs are more closely associated to the concept of the "new Argonauts" (Saxenian, 2011) which constitutes an authentic characteristic of entrepreneurs from the emerging countries. As shown in the results, the entrepreneurs' backgrounds usually include extensive abroad experiences and they leverage their far-flung networks in order to reach the US market from their country, which represents significant growth drivers. The potential investors are not directly integrated within the cluster and play a much more detached role as they most intervene in a second phase, when the startup enters its growth phase.

The neighborhood of Vila Leopoldina appears, in contrast, as a node or a component of a network which includes geographically distant actors (located in the US or Europe for instance). Exchanges are performed through high-speed systems of communication and entrepreneurs receive most of the help needed through external actors, being the investors. This contact with agents outside the local network acts as a substitute for the nonexistent proximity and direct contact with their peers- a feeling that is unmistakably absent among these firms. Each firm remains almost totally individualized and entrepreneurs are enclosed within larger structures and geographically within the same perimeters as the investors. Once again, the urban structures play a role, in this case, by accentuating the separation of each pole of entrepreneurs as the urban considered has no walking space or leisure activities.

7. Conclusion

The large metropolitan centers, such as Mexico City and Sao Paulo, are the ideal seedbeds for the development of new enterprises since they assemble the suitable conditions for new business ventures: Easy access to a wide range of actors of the business world, emergence of formal and informal networks, continuous informational flow, an urban setting as a source of distraction and inspiration. However, entrepreneurs in these two metropolises have to constantly adapt to the lack of amenities and/or problem of security for their employees, which strongly influence their choice of localization of a venture. As previously clarified in the literature review, the creation of an entrepreneurial ecosystem is the result of a multidimensional process. Entrepreneurs consider amenities that are able to sustain and shape the business idea into a promising startup. They also uphold sensitivity towards the symbolic value of the considered area, which promotes a convenient, comfortable, or even an inspirational environment to work.

Beyond the anticipated specificities of an entrepreneurial ecosystem in two developing Latin American urban centers, the juxtaposition of the Colonia Roma Norte (Mexico City) and Vila Leopoldina (Sao Paulo) have resulted in many similarities with other mature entrepreneurial environments in developed countries: Entrepreneurs in the high tech sector tend to see themselves to these more advanced ecosystems as role models. Based on the definition of an entrepreneurial ecosystem, both neighborhoods of the sample appear in a state of infancy. Although they possess some elements in common with other ecosystems, the dynamics between the different actors and institutions are still at their inception and not fully integrated. Access to financial capital remains difficult, and governments have only recently realized the need to spur an entrepreneurial culture and to offer an adapted regulation framework.

The breakdown of each neighborhood in terms of access to amenities as well as urban, cultural and social features has enhanced some fruitful conclusions in the understanding of the agglomeration of entrepreneurs in common locations. This has also highlighted the need to embrace the myriad of urban phenomena that emerge in developing cities.

First, the entrepreneurs interviewed have all expressed strong feelings — whether it was positive or negative- towards their working environment. This study attests to the lasting relevance of "place" as a meaningful unit of analysis. A.J Scott observes: "geography, [...], is not simply a passive frame of reference, but an active ingredient in the performance of important segments of the economy." Despite globalization effects, which have tremendously

accentuated and expanded the use of modern high-speed communication tools and the increasing international mobility especially among the young generation, the influence of the direct environment remains substantial and affects entrepreneurs on similar levels as entrepreneurs in traditional clusters.

The main findings draw sharp differences between both ecosystems and the entrepreneurs' relations with their urban surroundings, first noticed in terms of maturity of the firms (see 6.1). According to a company's stage of development, the dependence on the informal network and the spontaneous meetings present within the geographic surroundings of a firm will vary. In fact, when a startup leaves the initial phase of development and entrepreneurs get more experience, they will feel the need to reach out to higher levels of networks and more specific ones such as investors. Also, the imperative of cost rationalization increases as the firm expands; such an imperative will take over the personal inclination and preferences of the entrepreneur in the choice of the localization. These results arose after a comparison between Vila Leopoldina's industrial and functional setting and the Colonia Roma Norte's artistic and young neighborhood.

The same result was found according to the status of the firm – whether the firm was dependent on a larger structure such as an incubator (see 6.2). The more risk assumed by the entrepreneurs, the more likely they will be interconnected with other actors of the ecosystem.

The observed differences between both ecosystems prove their distinct organization and how they encourage entrepreneurial activity. While Vila Leopoldina appears as a node of relations, where the neighborhood is one microelement of a more global network, the Colonia Roma Norte's ecosystem in Mexico City, in contrast, has an intense internal activity visible through the frequent exchanges between entrepreneurs. For that matter, the Colonia Roma shares similar patterns with the development of the Silicon Valley, whose culture is primarily based on collaboration between entrepreneurs and the fluid and open-source transmission of knowledge among them. The ensuing trust that emerges contributes to the identity and the sense of community of entrepreneurs (see 6.3). Entrepreneurs feel like actors of their ecosystem and generally do not depend on public aid or programs.

However, the neighborhood studied in Sao Paulo, offers more solid support for the entrepreneurs to scale their companies and fully deploy their potential. The availability of the financial capital represents a higher degree of professionalization as the investors play a dual role of money lender and business advisor. Moreover, as the majority of the Mexican

entrepreneurs in the sample depend on the founders' own funds, the scalability of their ecosystem – its capacity to embrace a larger range of entrepreneurs – does not seem definite.

Alongside with Scott (2006) who sees the *hysteresis* -the dependence of a system on its past environment- as an important component of the regional development, the researcher acknowledges the specificities of the historic development of both neighborhoods and cities and their probable influence on the trajectory of each neighborhood in the sample. The historic evolution and its implications for the emergence of each ecosystem have not been a focus of this research, which therefore excludes a layer of analysis.

Furthermore, one must consider the relatively recent phenomenon of entrepreneurial ecosystems for the cities studied and the considerably underdeveloped field of research on this subject. The main bulk of the academic research is focused on the developed countries' ecosystems, being for the most part, the Silicon Valley.

The limited size of the sample in both cities has to be considered when reviewing the findings. It is difficult to generalize the findings on the basis of individual cases, which taken individually constitute a certain reality of the entrepreneurial activity of both cities. In this respect, generalizations based on these findings are not the intention of the author. Also, at the time of the study, both ecosystems were analyzed at their stage of infancy, and the relationship between the entrepreneurs and their environment is continuously evolving and expanding. These evolutions are modifying, in real-time, while the relations among the existent actors and new agents are regenerating constantly.

As the present research focuses on the decision of early-stage startups, with less than three years of existence, to open their offices in a particular environment, the influence of the urban environment on the performance of the firm cannot be the object of a deep analysis because of the lack of sufficient perspective and track record.

Daniel Isenberg (2010) notes that the efforts in creating an entrepreneurial culture are vain if these efforts are directed towards the goal of replicating the Silicon Valley's success. Entrepreneurial ecosystems are blossoming in very different parts of the world, constantly adapting to the particularities of their legal, economic, cultural and human environment. The present analysis of two up and coming ecosystems in two different cities, Sao Paulo and Mexico City, reveals that entrepreneurs respond to different stimuli when it comes to taking the initial decision of the localization of their first offices.

The emergence of entrepreneurial clusters in a shared geographic area is a complex phenomenon that does not easily fit into traditional economic theories (Glaeser, 2007). However, regarding the increased attention given to entrepreneurship as a long-term economic growth driver, research should embrace the diversity and multitude of different entrepreneurial ecosystems that exist and are constantly growing throughout the world.

This paper did not delve into the specific role and actions of governments in fostering favorable conditions for entrepreneurship. Nonetheless, the author does not ignore that it represents an essential element of the ecosystem. The comparative analysis, which is the object of this research, proves that governments must tailor their policies to the existing entrepreneurial networks in order to leverage the main strengths of their economies.

Also, this research intends to show that the methodological implications of qualitative research can bring relevant elements to the research on entrepreneurship even if this method has often been disregarded by this field. By centering his or her analysis on the individuals, one can create a bridge between several disciplines and offer a renewed perspective of this continuously evolving phenomenon that is the emergence of hubs of entrepreneurial ventures.

8. References

Aernoudt, R. (2004). Incubators: Tool for Entrepreneurship?. *Small Business Economics*, 23(2), 127-135

Agrawal, A., Kapur, D. & McHale, J. (2008). How do spatial and social proximity influence knowledge flows? Evidence from patent data. *Journal of Urban Economics*. 258-269.

Almazan, A., Motta (de), A. & Titman, S. (2003). Firm location and the creation and utilization of human capital. *NBER Working Paper Series*, Working Paper 10106

Ang, J. (1991), Small business uniqueness and the theory of financial management. *Journal of Small Business Finance*, 1, 1-13.

Angel, D. (1990). New Firm Formation in the Semiconductor Industry: Institutional Infrastructures. *Regional Studies* 24:211–21

Araujo, M. (1993). Trajetoria Econômica e especial da Metropole Paulista. *Sao Paulo em perspectiva* : 7 (2) 29-37

Arregui, A., R., (2012). Mexico's growth will come from entrepreneurship and small and medium-sized enterprises. *Innovations*, 7(1)

Arrospide, B. (2012). Startups in Latin America: Opportunities and resources for Wharton Entrepreneurs. Retrieved from :

 $\frac{http://beacon.wharton.upenn.edu/entrepreneurship/2012/08/start-ups-in-latin-america-opportunities-and-resources-for-wharton-entrepreneurs/$

Astebro, T. & Bernhardt, I. (2003). Start-up financing, owner characteristics, and survival. *Journal of Economics and Business*, 55, 303–319

Audrestch, D.B. & Keilbach, M. (2007). The localization of entrepreneurship capital: Evidence from Germany. *Jena economic research papers*.

Audrestch, D.B. (2007). Entrepreneurship capital and economic growth. *Oxford Review of Economic policy*, 23: 63-78.

Audretsch, B. (1998). Agglomeration and the location of innovative activities. *Oxford Review Economic Policy*, 14, 18-29.

Audretsch, D., & Keilbach, M. (2002). Entrepreneurship Capital and Economic Performance. *Zentrum für Europäische Wirtschaftsforschung*, 02-76

Babson Entrepreneurship Ecosystem Project, Retrieved from: http://www.babson.edu/enterprise-education-programs/babson-global/Pages/entrepreneurship-ecosystem.aspx

Berger, A.N & Udell, G.F. (2005). A more complete conceptual framework for SME Finance. *Journal of Banking and Finance*.

Berger, A.N. & Udell, G.F. (2005). Strategic Entrepreneurs at Work: The Nature, Discovery, and Exploitation of Entrepreneurial Opportunities. *Journal of Banking and Finance*.

Bernardini, M.M (2005). Operações urbanas em São Paulo : criticas, plano e projeto. *Arquitextos*, Retrieved from:

http://www.vitruvius.com.br/revistas/read/arquitextos/06.062/443

Birdseye Weil, H. & Utterback, J, M. (2005). The dynamics of innovative industries. *International System Dynamics Conference*: Boston

Brandt, N. (2011), "Informality in Mexico", *OECD Economics Department Working Papers*, No. 896, OECD Publishing. http://dx.doi.org/10.1787/5kg3nzlp1vmq-en

Brecha. (2012, August 21st). El Hub más grande del mundo. Retrieved from: http://brecha.org/el-hub-mas-grande-del-mundo% E2% 80% A6-en-df/

Bruderl, J. Presendorfer, P.& Ziegler,R.(1992). Survival chances of newly founded business organizations. *American Sociological Review*, 57:2 227-242.

Burmeister, K. & Schade, C. (2007). Are entrepreneurs' decisions more biased? An experimental investigation of the susceptibility to status quo bias. *Journal of Business Venturing*, 22(3), 340-362.

Capote, R. (2011, July, 22nd). Economia criativa adota Vila Leopoldina. *Folha de Sao Paulo*. Retrieved from: http://www1.folha.uol.com.br/fsp/mercado/me2207201104.htm

Carr, J.H & Servon, L.J (2009). Vernacular culture and Urban Economic Development. *Journal of the American Planning Association*. Vol.75, No1

Carroll. Glenn R. & J. Richard Harrison. (1994). On the Historical Efficiency of Competition between Organizational Populations. *American Journal of Sociology* 100:720–49

Chandra, A. (2007). Business Incubation in Brazil: Creating an Environment for Entrepreneurship. *Networks Financial Institute: Indiana State University*, Working paper

Chaudhry, T. (2005). Industrial Clusters in Developing Countries: A Survey of the Literature. *The Lahore Journal of Economics*, 10, 2, 15-34

Chen, H., Gompers, P., Kovner, A & Lerner, J. (2010). Buy Local? The geography of Venture Capital. *Journal of Urban Economics*, 67, 90-102

Cheng, S.(2011). Access to capital from various sources and new venture survival. *Paper presented at the Fox School of Business-Kauffman Foundation Workshop on Empirical Entrepreneurship*

Chinitz, B. (1961). Contrasts in Agglomeration: New York and Pittsburgh. *American Economic Review*, 51, 279-289.

Ciravegna, L. (2011). FDI, social ties and technological learning in new Silicon Valley clones. Evidence from the Costa Rican ICT cluster. *Journal of Development Studies*, 47 (8)

Charvel, R. (2008). A comprehensive look at the private equity industry in Mexico 1990-2006. ITAM: Escuela de negocios

Clark, T.N., Lloyd, R., Wong, K.K & Jain, P. (2001). Amenities drive urban growth. *American Political Science Association annual meeting*.

Companys, Y.E & McMullen, J.S. (2007). Strategic Entrepreneurs at Work: The Nature, Discovery, and Exploitation of Entrepreneurial Opportunities. *Small Business Economics*.

Competitive Instability, Skills, Innovation and the Strategy of Agglomeration, University of Toronto.

Cooper, A.C & Woo, C.Y. (1988). Entrepreneurs' perceived chances for success. *Journal of Business Venturing*, 3-2, 97-108

Cornejo, A. (2012, March 13th). Fernando Fabre: Latin America needs more role model startups to catch up in the tech scene. *Pulso Social* Retrieved from: http://pulsosocial.com/2012/03/13/fernando-fabre-latin-america-needs-more-role-model-start-ups-to-catch-up-in-the-tech-scene/

Crewe, L. & Beaverstock, J. (1998). Fashioning the city: cultures of consumption in contemporary urban spaces. *Geoforum*, 29-3, 287-308.

Curran, J., & Blackburn, R. (2001). Researching the Small Enterprise. London: *Sage Publications*

Deak, C. & Schiffer, S. (2004). The metropolis of an elite society.

De Bruin and Dupuis (2003). Entrepreneurship: New perspectives in a Global Age. *Ashgate Pub Ltd*

Delgado, M., Porter, M.E. & Stern, S. (2011). Clusters, convergence and economic performance. *Journal of Economic Geography*, 1-24.

Desrochers, P. & Leppala, S. (2011). Opening up the 'Jacobs Spillovers' black box: local diversity, creativity and the processes underlying new combinations. *Journal of Economic Geography*, 843–863

Dobbs, R., Remes, J. & Smit S. (2011). The world's new growth frontier: Midsize cities in emerging markets. *McKinsey Quarterly: McKinsey Global Institute*.

Duranton, G. & Puga, D. (2001) Nursery cities: Urban diversity, Progress Innovation, and the Life Cycle of Products. *American Economic Review*, *91-5*, 1454-1477

Duranton, G. & Puga, D. (2003). Micro-foundations of urban agglomeration economies. *Handbook of Regional and Urban Economics*, vol.4

Duranton, G. (2007). Urban Evolutions: The Fast, the Slow, and the Still. *American Economic Review*. 97(1): 197–221. DOI:10.1257/aer.97.1.197

Elfring, T & Hulsink, W. (2001). Networks in entrepreneurship. The case of high-technology Firms. *ERIM Report Series Research in Management*.

Ernst & Young. (2011). Entrepreneurs speak out: A call to action for G20 governments. Retrieved from:

http://www.ey.com/Publication/vwLUAssets/G20_Entrepreneurship_barometer_-_Mexico_report/\$FILE/barometer_G20_Mexico.pdf

Evans, D.S. & Leighton, L.S. (1989). Some Empirical Aspects of Entrepreneurship. *The American Economic Review*, 519-535.

Feldman, M.P. & Audretsch, D.B.(1998). Innovation in cities: Science-based diversity, specialization and localized competition. *European Economic Review*, 43: 409-429

Florida, R. & Kenney, M. (1988). Venture capital and high technology entrepreneurship. *Journal of Business Venturing*, *3*, 310-319.

Friedman, J. and Wolff.G (1982). World City formation: an agenda for research and action, International. *Journal of Urban and Regional Studies*.

Fujita, M.(2002). Economics of Agglomeration: Cities, Industrial Location and Regional Growth, *Cambridge University Press*, 480

Fusco, C. (2011, July 22nd). Galpao vira incubadora de negocios em SP. *Folha de Sao Paulo*. Retrieved from : http://www1.folha.uol.com.br/fsp/mercado/me2207201103.htm

Gartner, W.B. (1985). A Conceptual Framework for Describing the Phenomenon of New Venture Creation, Academy of Management Review, 10-4, 696-706

Ghauri, P & Gronhaug, K. (2002). Research Methods in Business Studies, *Prentice Hall*, Harlow.

Gibbert, M., Ruigrok, W. & Wick, B. (2008). Research notes and commentaries: what passes as a rigorous case study? *Strategic Management Journal*, 29: 1465–1474

Glaeser, E.L & Kahn, M. (2001). Decentralized employment and the transformation of the American city. *NBER Working Paper 8117*.

Glaeser, E.L, Kallal, H.D., Scheinkman.J.A, Shleifer, A. (1992). Growth in cities. *Journal of Political Economy*, 100, 6

Glaeser, E.L, Kerr, W.R. & Ponzetto, G. A.M.(2010). Clusters of Entrepreneurship. *Journal of Urban Economics*, 67, 150-168.

Glaeser, E.L. (2007). The economic approach to cities, *National Bureau of Economy Research*, *NBER Working Paper No. 13696*

Glaeser, E.L.(2009), How Competition Saved New York?, *The New York Times*, http://economix.blogs.nytimes.com/2009/04/07/how-competition-saved-new-york/

Global Entrepreneurship Monitor (2011). Empreendedorismo no Brasil.

Gompers, P. & Lerner, J. (2001). The venture capital revolution. *Journal of Economic Perspectives*, 15:2, 145-158

Granovetter, M. (1985). Economic action and social structure: The problem of Embeddedness. *American Journal of Sociology*, *91-3*, 481-510.

Guerrien, M. (2004). Transformation et fragmentation des espaces urbains. Le cas de la zone métropolitaine du bassin de Mexico. *L'espace géographique*, 33 : 336-352.

Hansen, J.B., Ban, C & Huggins, L. (2003). Explaining the "Brain Drain" from older industrial cities: The Pittsburg region. *Economic Development Quarterly*, 132-147

Hatzichronoglou, T. (1997). Revision of the High-Technology sector and product classification. *OECD Science Technology and Industry Working Papers*, Paris.

Hayden, D. (1997), The Power of Place: Urban landscapes as public history. *Cambridge, MA: MIT Press*

Heebels, B. & Van Aalst, I. (2010). Creative clusters in Berlin: Entrepreneurship and the quality of place in Penzlauer Berg and Kreuzberg. *Geografiska Annaler: Series B, Human Geography* 92(4): 347-363

Hellmann, T. & Puri, M. (2002). Venture Capital and the professionalization of startup firms: Empirical evidence. *Journal of Finance, American Finance Association*, 57(1), 169-197

Henderson, J. V.(1974). The Sizes and Types of Cities. *American Economic Review*, *American Economic Association*. 64(4), 640-56

Henderson, J. V.(2002). Marshall's scale economies, *Journal of Urban Economics*, doi: 10.1016/S0094-1190(02)00505-3

Hitt, M., R. Duane Ireland, S. Michael Camp and Donald L. Sexton (2001), Guest Editors' Introduction to The Special Issue, Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation, *Strategic Management Journal*, 22, 479-491

Isenberg, D.J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, Retrieved from: http://hbr.org/2010/06/the-big-idea-how-to-start-an-entrepreneurial-revolution/ar/1

Jack, S. & Anderson, A. (2002). The effect of embeddedness on the Entrepreneurial Process. *Journal of Business Venturing*

Jackson, J.B. (1994). A sense of place, a sense of time. New Haven, CT: Yale University Press.

Jacobs, J. (1969). The Economy of Cities. Vintage Books Edition, Chapter 3 & 4

Johansson, B., & Quigley, J.M. (2004). Agglomeration and networks in spatial economies. *Regional Science*, 83

Jonsen, K. & Jehn, K.A. (2009). Using triangulation to validate themes in qualitative studies. *Emerald Group Publishing Limited*

Kantis, H.D. & Federico, J.S. (2012). Entrepreneurial ecosystem in Latin America: The role of policies, *The Kauffman Foundation* Retrieved from: http://www.kauffman.org/uploadedfiles/irpr_2012_kantis.pdf

Kirzner, I.M. (1997). Entrepreneurial discovery and Competitive Market Process: an Austrian approach. *Journal of Economic Literature*, *35*: 60-85.

Koellinger, P., Minnitti, M. & Schade, C. (2005). Excess Entry and Entrepreneurial Decisions: The Role of Overconfidence. *German Institute For Economic Research*

Krieger, P. (2010). L'image de la mégalopole: Comprendre la complexité visuelle de Mexico. *Diogène, PUF*, 231: 74-89.

Krieger, P. (2010). L'image de la mégalopole : comprendre la complexité visuelle de Mexico. *Diogène* : 231, p. 74-89. DOI: 10.3917/dio.231.0074

Lerner, J. (2010). Geography, Venture Capital, and Public Policy. *Taubman Center, Harvard Kennedy School* Retrieved from:

http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-programs/centers/taubman/PB_final_lerner_vc.pdf

Loabsy, B.J., (2010). Capabilities and strategy: problems and prospects. *Industrial and Corporate Change*, 19(4), 1301-1316.

Lundström, A & Stevenson, L. (2001) Entrepreneurship Policy for the Future, Swedish *Foundation for Small Business Research*.

Markusen, A., (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72(3), 296-313.

Mata da, D., Deichmann, U., Herderson, J.V., Lall, S.V., Wang, H.G. (2005). Determinant of city growth in Brazil. *NBER working papers*

Mc Donald, E.R. (2002). Knowledge entrepreneurship: Linking organizational learning and innovation. Ph.D The University of Connecticut.

McKinsey Global Institute. (2011). Building globally competitive cities: They key to Latin America growth.

McMillan, J. & Woodruff, C. (2002). The central role of entrepreneurs in transition economies. *Journal of economic perspectives*, 16: 3 153-170

McMullen, J.S & Shepherd, D.A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31-1, 132-152.

Merton, R.K., Fiske, M. & Kendall, P.L.(1990). The Focused Interview: a manual of problems and procedures. The free press.

Mian, S.A. (1996). Assessing value-added contributions of university technology business incubators to tenant firms. *Research Policy*, 325-335

Michelacci, C. & Silva, O. (2005). Why so many local entrepreneurs? *CEMF*, working paper 0506

Miller Llana, S. (2010, April 8th). Big-business Brazil taps into its young entrepreneurs. *The Christian Science Monitor*, Retrieved from:

 $\frac{http://www.csmonitor.com/World/Americas/2010/0408/Big-business-Brazil-taps-into-its-young-entrepreneurs/(page)/2$

Mollick, E.(2012). The dynamics of crowdfunding: determinants of success and failure. Wharton School of the University of Pennyslvania.

Mondragon-Velez, C. (2007). The transition to entrepreneurship: Human capital, wealth and the role of liquidity constraints. *Working Papers Series*

Murray, G. (2012). Government co-financed hybrid venture capital programmes: Generalizing developed economy experience and its relevance to emerging nations. Paper presented at the *International Research and Policy Roundtable (Kauffman Foundation)*, Liverpool, UK.

Nobre. E.A.C. (1998). Urban development of a Latin American world city: the case of Sao Paulo. *Urban design International*, 3(3), 135-140.

North, D.C. (1990). Institutions, institutional chance and economic performance. *Cambridge university press*.

Organization for Economic Co-Operation and Development. (1998). Fostering Entrepreneurship, Paris: OECD.

Organization for Economic Co-Operation and Development. (1996). The knowledge-based economy, Paris. Retrieved from: http://www.oecd.org/sti/scienceandtechnologypolicy/1913021.pdf

Page West III, G. & Banford, C.E. (2005). Creative a technology-based entrepreneurial economy: A resource based theory perspective. *Journal of Technology Transfer*, 30: 433-451.

Parnreiter, C. (2002). Ciudad de Mexico: el camino hacia una ciudad global. Revista eure, 28(85), 89-119

Petrongolo, B. & Pissarides, C.A. (2000). Looking into the black box: A survey of the matching function. *Centre for Economic Performance LSE*

Pitelis, C. (2012). Clusters, entrepreneurial ecosystem co-creation, and appropriability: a conceptual framework, *Industrial and Corporate Change*.

Porter, M.E (1998). Clusters and the New Economics of Competition, *Harvard Business Review*http://www.isc.hbs.edu/econ-clusters.htm

Prevenzer, M. (1997), 'The Dynamics of Industrial Clustering in Biotechnology. *Small Business Economics*, 9(3), 255-271.

Quigley, J.M., & Huffman, D. (2002). The role of the university in attracting high tech entrepreneurship: A Silicon Valley tale. *The Annals of Regional Science*, 36, 403-419

Rapoza, K. (2012, October 10th). Sorry Brazil, Investors prefer Mexico. Retrieved from: http://www.forbes.com/sites/kenrapoza/2012/07/10/sorry-brazil-investors-prefer-mexico/

Reuters. (2012, August 9th). Mexico could pass Brazil as top LatAm economy in 10 years-Normura. Retrieved from: http://in.reuters.com/article/2012/08/08/latam-economy-idINL2E8J8AGR20120808

Reynold, P et al. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998-2003. *Small Business Economics*, 24, 205-231. Retrieved from: http://www.kauffman.org/uploadedFiles/Thoughtbook_2011.pdf

Rhett Morris. (2011). 2011 High impact entrepreneurship global report. *Center for high-impact entrepreneurship*. Retrieved from: http://gemconsortium.org/docs/download/295

Romanelli, E. & Khessina, O.M. (2005). Regional industry identity: Cluster configurations and Economic Development. *Organization Science*, *16*: 4, 344-358

Sahlman, W.A. (2009). Endeavor: Creating a global movement for high-impact entrepreneurs. *Harvard Business School Case studies*.

Sardenberg, C.A. (2012). Custo Brasil, é nois! *Estadao*, Retrieved from: http://economia.estadao.com.br/noticias/economia%20brasil,custo-brasil-e-nois!,113139,0.htm

Saxenian, A.L. (2011). The New Argonauts. *Global Diaspora Strategies Toolkit*, http://diasporamatters.com/wp-content/uploads/2011/05/Diaspora-Toolkit-Booklet-1.pdf

Saxenian, AL. (1990). Regional networks and the resurgence of Silicon Valley. *California Management Review*, 33

Saxenian, AL. (1994). Regional Advantage: Culture and Competition in Silicon Valley and Route 128, *Harvard University Press*

Saxenian, AL. (1998). A valley asset: the increased role of skilled immigrants. *San Jose Mercury News*.

Saxenian, AL. (2006). The New Argonauts: Regional Advantage in a Global Economy

Scott, A. (2006). Entrepreneurship, innovation and industrial development geography and the creative field. *Small Business Economics*, 26(1), 1-24

Scott, A.J. (2010). Cultural economy and the creative field of the city. *Munich Personal RePEc Archive*.

Shane, S. & Venkataraman, S.(2000). The promise of entrepreneurship as a field of research. *The Academy of management review*, 25: 1, 217-226

Sohl, J.E. (2003). The US Angel and Venture Capital Market: Recent Trends and Developments. *Journal of Private Equity*, 6:2, 7-17.

Sorenson, O. & Audia, P.G. (2000). The social structure of Entrepreneurial Activity: Geographic concentration of Footwear Production in the Unitied-States, 1940-1995. *American Journal of Sociology*, 106:2, 424-462

Sorenson, O. & Dahl, M.S. (2009). The Embedded entrepreneur. *European Management Review*, 6, 172-181

Sorenson, O. & Dahl, M.S. (2011). Home sweet home: Entrepreneurs' location choices and the performance of their ventures. *Management Science*, 58-6, 1059-1071

Sorenson, O. & Stuart, T. (2003). The geography of opportunity: spatial heterogeneity in founding rates and the performance of biotechnology firms. *Research Policy*, 229-253

Sorenson, O., Rivkin, J.W. & Fleming, L. (2006). Complexity, networks, and knowledge flow. *Research Policy*, 35, 994–1017

Startup Genome & Telefonica Digital. (2012). The Startup Ecosystem Report 2012. Retrieved from: http://cdn2.blog.digital.telefonica.com.s3.amazonaws.com/wp-content/uploads/2012/11/Startup-Ecosystem-Report-2012.pdf

Storper, M. & Scott, A.J. (2009). Rethinking human capital, creativity and urban growth . *Journal of Economy Geography*, 147-167

Strange, W., Hejazi, W. & Tang, J. (2006). The Uncertain City: Competitive Instability, Skills, Innovation and the Strategy of Agglomeration. *Journal of Urban Economics*, 59(3), 331-351

Strange, W.C & Helsley, R.W.(2009). Entrepreneurs and Cities: Complexity, thickness and balance. *University of Toronto, paper retrieved from:*http://groups.haas.berkeley.edw/realestate/PhD%20Seminar%20articles/Entrepreneurs%20articles/

Strange, W.C. (2008). Agglomeration Research in the Age of Disaggregation. *Canadian Journal of Economics*, 200

Sutton, R.I. & Staw, B.M. (1995). What Theory Is Not. *Administrative Science Quarterly*, 40, 371–84

Talbot, D.(2012). How much Tech can one city take? *Modern Luxury*. http://www.modernluxury.com/san-francisco/story/how-much-tech-can-one-city-take

The Economist (2012, November 21st). Enrique Pena Nieto, Mexico's newly elected president, sets out his priorities. Retrieved from: http://www.economist.com/news/21566314-enrique-pe%C3%B1a-nieto-mexicos-newly-elected-president-sets-out-his-priorities-mexicos-moment

The Economist. (1995). The death of distance.

The Economist. (1997). A connected world. http://www.economist.com/node/598895

The Economist. (2012, October 8th). Will Brazil remain the country of the future? Retrieved from: http://www.economist.com/blogs/freeexchange/2012/10/growth

Thurik, R. (2009). Entrepreneurship, Economic Growth and Policy in Emerging countries. *World Institute for Development Economics Research*

Trettin, L. & Welter, F. (2007). Spatially oriented entrepreneurship research at a crossroad. *IECER*.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. American Sociological Review, 61(4), 674-698.

Vigier.F., et al. (2003). Historic center of Mexico City. *Harvard University, Graduate School of Design, Center for Urban Development Studies*. Retrieved from: http://i2ud.org/documents/Mexico_city_report.pdf

Von Hippel, E. (1994). "Sticky Information" and the Locus of Problem Solving: Implications for Innovation. *Management Science*, 40-4, 429-439.

Yin, R.K. (2008). Case Study Research: design and methods. Sage: Fourth Edition.

9. Annexes

9.1 Conduct of the interview

1) Formulating the purpose of the interview

My research consists in understanding which criteria are most important to you when choosing where to settle in a particular neighborhood.

2) <u>Interview questions for entrepreneurs</u>

1. About the startup

- 1.1 What is the firm mission/activity? How many partners are you?
- 1.2 When did you launch your venture? Did you become operational right away?
- 1.3 Is Colonia Roma/Vila Leopoldina, your first neighborhood or did you move here after the creation?

Financing:

- What was your initial source of capital? Have you raised capital since then (if yes, from which institution (seed capital, BAs, VCs,...?))
- Have you ever heard of crowd funding? Have you thought of it as a possible financing instrument?
- How did you have access to these institutions: Did you contact the institution or was it through a startup competition or through a contact?
- Do you personally own part (or totality) of the venture's share?
- How often do you interact with your investors? (Weekly/ monthly/annually) and what is the preferred form of contact (email/lunch/formal meeting?)
- Who (can be persons, institutions ...) has been essential in this venture?
- Do you generate profits?

Location:

- Your target market (the majority of your clients): is it local (just for the neighborhood/Mexico DF/Sao Paulo) or national/international?
- Do you have interactions with your clients? What is the interface (shop/website)?
- Do you know if any of your direct competitors are located in the same area?
- Before choosing Colonia Roma/Vila Leopoldina, which other neighborhoods were you considering? Who/what did influence your decision to move here?

- How did your relatives (family/friends) and professional contacts react when you told them you moved in Colonia Roma/vila Leopoldina?
- What are the main advantages you see in this neighborhood? Inconvenients?

Transportation:

- How do you get to work? (walking, bike, public transportation, car) & how long did it take you to come to work?
- Have you considered moving in the neighborhood to be closed from work?
- Are you considering moving your office to another neighborhood (when it will be more successful for instance)
- Do you have expansion plans for the startups (to other states/ or countries)?

Human capital:

- Have you started recruited people beyond the initial team?
- How do you recruit them (post applications on your website, through friends, others). The interns for instance?

Culture:

- Do you know other startups of a relative sector that work in this neighborhood?
- Do you sometimes work outside of your office (in a café?)
- Do you spend time in this neighborhood beyond work time? (at night, weekends?) Do you practice other activities (such as leisure activities in the neighborhood?)
- Do you feel safe walking in this neighborhood?
- How do you evaluate the "agreeability" of Roma/vila Leopoldina?
- How would you define the "identity" of this neighborhood? (in few words)
- Among these words, which ones seem to correspond to the neighborhood : diversity young industrial green corporations space fun solidarity transformation segregation other suggestions ?
- What are your favorite neighborhoods in the city?

Offices:

- Did the team create and equip the offices itself or was the structure already there?
- How much is the monthly rent (and what other expenses do you have)? (if not confidential) Do you consider it is cheap or expensive? Was it a sacrifice to move in this neighborhood?
- Was it hard to find offices in this neighborhood? How long did it take you?

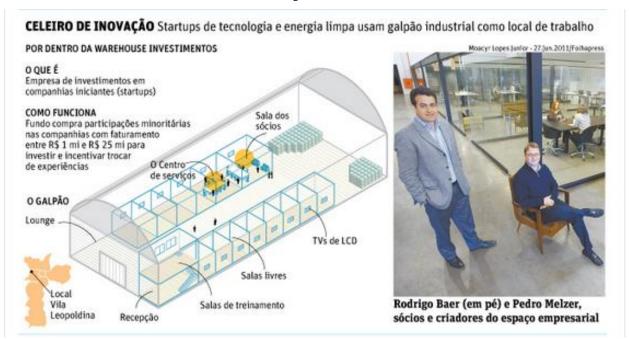
2. About the entrepreneur

- 2.1 How old are you?
- 2.2 Are you from Mexico DF/Sao Paulo? (if not, how long have been living in DF/SP or have you been studying in DF/SP)?
- 2.3 Do you live in Colonia Roma/ Vila Leopoldina? (If yes, have you moved here consecutively at the creation of the startup or did you live here before?)
- 2.4 Do you live in the same building of your startup? Same street?
- 2.5 Are you planning on moving somewhere else?
- 2.6 Where do your relatives (family and friends) live?
- 2.7 Is it your first venture or did you previous experience in working as an entrepreneur? What about your partners? What was your previous experience with the sector?
- 2.8 What's your definition of Entrepreneurship?

9.2 The entrepreneurs' offices layout, Sao Paulo

The Warehouse Investimentos and Rocket Internet offices

The warehouse renovated and remodeled into modern glassed offices



Source: Folha de Sao Paulo, 22 of July 2011.

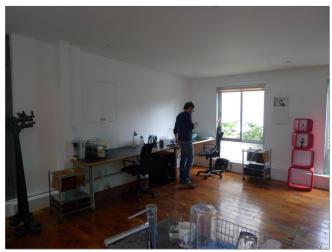
Originally meant as a residential area, the highly-secured and newly built complex is only rent by firms. Here the building rent by Rocket Internet:



Source: the author, Vila Leopoldina, in July 2012

9.3 The entrepreneurs' offices layout, Mexico City

CitiVox, Cirklo and the Mexican VC (including Aventones and Arto)

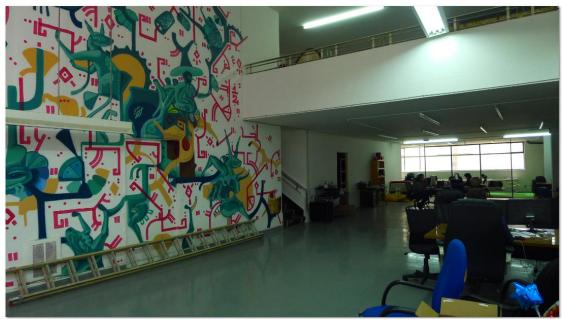




Both startups, CitiVox and Cirklo, have set their offices in apartment building that they have themselves remodeled. Organized in an open space, the team is sharing a same space



Mexican VC building's façade is painted in bright color in order to "tell others that something is happening here" (Cesar Salazar)



Mexican VC shares the two floors story space with other startups. The interior is freely organized by each firm and the mural painting was given to Arto which works with artists.

9.4 Profile of Mexican entrepreneurs and their answers to the questions

Companies	CITIVOX	Aventones	Arto Of O	cirklomx
Mission	Online communication	Carl pooling online service	Creative art projects online platform	Innovative projects with social impact
About the startup	2010 by two partners: Oscar Salazar & Jorge Soto (33 years old and 26 years old). Created in Mexico City. Both are still working for the company.		artists in a festival to create a piece	Preparation since August 2011 but officially January 2012 2 friends from university (Julio Salazar and two other partners.
Slogan	"Communication between citizens and government" "Empower the population"	"Change the way people see their future and mobility in the city"	"Art for the people, Art outside the museums"	To have a social impact in doing business
Activity Main products	 Citizen reports on various subjects that provide material evidence for decision makers Online platform to create private community of interests for citizens (free service) 	 Create online private community where it's safer to share your car Promote culture of car pooling 		- Organize and assist corporations, NGOs and government think about social impact by organizing events and incorporate social problematic within their strategy

			- Art Studio for brands to contract artists	
Clients	 Portfolio equally distributed between NGOs, Governments and Development agencies 50% of projects in Mexico & 50% abroad (projects in 10 countries) 	 Large corporations in Mexico City (KPMG, Danone, etc) General audience through consciousness-raising campaing 	Both local and international clients - Major consumer brands (Coca Cola, Carlsberg,) that associate to the projects on festival - General audience (international) through the online platform	- Currently five projects (clients in Mexico DF) mainly big corporations
Interaction with clients	 Mainly through Skype Travel when sophisticated project Opening a 2nd office in NYC 	- Formal meetings at the headquarters		- Meeting in the neighborhood or inside the office (goal : to bring clients to come work (sporadically) in their offices
Competitors	- Not directly in Mexico. Several in the US and Chile.	- No direct competitors.	 No competitors in Mexico for the street art projects, it is a collaboration between artists, municipalities and private corporations. For the online Platform, major competitors are in the US (UGallery, ArtScene,) 	- No direct competitors.
	- 1 st product : Founders' money +	- Financed through services sold		

Investors	 BAs, then incomes from services - 2nd product: one VC + BAs based in Mexico and the US (facilitated by Endeavor and contacts) - Crowdfunding is not interesting because it's not "smart money", we wanted mentors/advice that we can select. 	but currently closing a deal with a VC.	 Idea of crowdfunding for art projects but too much money required. Mainly financed through founders' money. Became profitable early 2012 (more than 2 years after the beginning) Currently thinking of leveraging money for the online platform (e-commerce) 	- Profitable since Feb 2012 through services
Employees	Recruited through contacts or through entrepreneurs' competition	Through headhunter Two positions open: Sales + communication Most of people interviewed live in the surroundings neighborhoods	programmers that are based in another state (communication	Two employees through contacts . One is the sister of a founder recruited for her "fresh eye" in the art world + one other that joined as a partner, friend of the other partner.
1 st Office location	Looking at different options in more "institutional" neighborhoods such as Polanco or Santa Fe (but in the end infamous traffic jams to reach the work place). Final choice for Roma because found this really new building, close to home (1st office, 2 years ago)	from a friend) but unsafe, no	after Mexico City because it is where the entrepreneur studied) Then, moved to the entrepreneur's flat in Mexico City months ago: the current office in Roma (found through contacts)	 First, no permanent office (3 months). Working from cafes in the nearby neighborhood (rotation of cafes): good for meeting and to randomly meet entrepreneurs 1st office (5 months) in the same street > too small Current office: in front of the Mexican VC "Roma Valley"

Are you sharing a co-working place?	No but would have been good at first (In 2010, no co-working places existed).		Yes. First experience. "Surrounded by programmers, different culture but we do benefit from them". Informal meetings: Lots of shared experience and help although not part of Mexican VC.	Yes. Space sharing with another startup in social media so shared needs and vision of the space.
Which way of transportation do they use?	Every possible public transportation + bike	Every possible public transportation + bike	"Seven min walking from home". Live in the neighborhood previously to moving the offices	By car (25min to one hour). Planning to move in the neighborhood "to avoid stress and privilege another lifestyle". One other partner is 10 min walking away from work. Lunch time in the neighborhood.
Where do meetings take place?	Lots of informal meetings in the neighborhood. Investors enjoying coming to the neighborhood.	At the corporations' headquarters (fomal meetings)	Outside the office because lots of coffee shops (very convenient and casual) Inside the office because the major clients are interested in coming in the office and visit it, curious about the development in this part of town.	Inside the office or outside in the neighborhood.
Evolution of the work place	Extension to 2 nd floor, own decoration. Not considering moving anymore.	Huge space + cheap rent but needed complete renovation. Progressive renovation.	Shared Office with Aventones. Large spacious office decorated by the entrepreneurs themselves	Spacious room with one long table. Furniture belong to them.

			(through art project)	
Entrepreneurs' housing location	Ten min by bike from the office. Similar neighborhood in the same area. Settled before finding the office.	20 min car – 40min bus. Come with her mother by car and leave either before or after traffic peaks.		25 min to one hour by car (hard to park in the neighborhood).
Definition of the neighborhood's culture	"I work one or two hours per day in a café of the neighborhood" Young, Entrepreneurs, cool Culture of openness & sharing ideas "Since I arrived, more funds for early stage came in the neighborhood" > attractive neighborhood	but haven't found the place yet". Cheap lunch (Menu at 40pesos)	Roma Norte: "less commercial" "less mainstream" "less expensive". But it's moving fast and gentrification is already happening. The neighborhood is historical, it's a mix of families and young generation (artists, entrepreneurs).	Young, fast, intellectual. Neighborhood with character.
Security	Very safe, even at night/No feeling of insecurity	Don't feel safe at night. Don't' walk alone to my car	No problem of safety/ No feeling of insecurity	At first, feeling of insecurity (for the female partners) but rapidly dissipated.
Definition of Entrepreneurship	Learn fast, fail fast. Not being afraid of failing all the time. The entrepreneur needs to focus on growth not necessarily on incomes at first.		Started through social entrepreneurship with the feeling of doing something useful for the country (first project as a news' website, then NGO in the education)	

9.5: Profile of Brazilian entrepreneurs and their answers to the questions

	iFood	TerraCycle	Payleven
Companies	O Delivery dos Deliveries	TERRACYCLE SUPERE O DESPERDÍCIO	payleven
Sector	Online platform for food delivery	Making consumer products from recycled material	Mobile payments solution provider incubated in Rocket Internet Online venture builder 100 market-leading companies in 40+ countries
Startup creation	March 2011 from two partners, Patrick Sigrist (already entrepreneur <i>Disk Cook</i> for 14 years) and Felipe Fiovarante .		
Slogan/Mission	O delivery dos deliveries	"Supere o desperdicio" (Overcome waste)	
Activity / Main products	Online service for food delivery	Transform trashes into new products; recycle material in order to "eliminate the idea of trashes".	Mobile payment solution provider operating through a credit card lector along with a smarphone application for firms and individuals to realize payments

Clients	1,000 restaurants partners and 35,000 deliveries every month in 8 cities	From two to 14 clients, essentially large companies	600 clients (at 10/14/12) but the ambition is to reach 500,000 clients by the end of 2013. Small businesses are targeted
Interaction with clients	No need, through online platform	Formal meetings at their offices	
Competitors	Early in the market but now, 2 main competitors including <i>Peixe Urbano</i>	-	
Investors	Warehouse Investimentos that invested 3 M Reais (= 1,4 MUSD) and provides a working space (not free)	Warehouse Investimentos	Rocket Internet, incubator based in Germany with offices in Latin America
Employees	20 employees – lots of employees live in more central areas (+ 1h transport) Close to University of Sao Paulo, good to recruit interns	Growth from two to eight employees	Totalizing all firms of Rocket Internet, up to 400 employees. Mainly recent graduates therefore practical location near the Public University (USP)
1 st Office location	Vila Olimpia but our contract was coming to an end.	Vila Madalena in a small house. The neighborhood was better to get together and organize events. But change to gain a more corporate image "The change was for the worst for the employees as everything is more expensive and here we need the car to move around"	In a more central area but the fast-growing pace forced to a relocation in Vila Leopoldina

Co-working place	Yes among Warehouse Investimentos	Yes among Warehouse Investimentos but very few interactions with the other entrepreneurs	Yes, total of six floors and lots of mobility among the 12 different firms depending on the competencies needed
Transportation	"I live pretty close, in Butanta so 25 min by car"	By car and it takes one hour each way	Main access road (Marginal Pinheiros) and CPTM (urban train) to meet central areas
Meetings	No need	Primarily at the office for visit and presentation of the products ("the office is our showcase") or at the companies' offices	In the firm offices
Evolution of the work place	Planning to move out early 2013 our condition: "nice space, close to public transportation" (to acquire more space)	Freedom to adapt the space but existence of conditions imposed by the investors	Expanding rapidly through the bying of new floors but the space is under its full capacity so enough space to keep growing Lots of informal contacts within the employees, but none with other entrepreneurs of the area
Entrepreneurs' housing location	In a nearby neighborhood but not determinant in the choice of the office – sometimes work from home (Felipe Fiovarante) The partner Patrick Sigrist bought an apartment in Vila Leopoldina	In the southern neighborhoods of the city. Not close from the office	In average, young employees (recent graduates)
Definition of the neighborhood's culture	"Really industrial", not a lot of infrastructure	Residential and familial neighborhood	
Security	Not great – not have had problem yet but empty, dark streets	Not great –few people walking at night	The offices are the only securized buildings, outside presence of a <i>favela</i> in the surroundings. Example of another firm that refused to move to the neighborhood for this particular reason

Definition of Entrepreneurship		position of a consultant for TerraCycle US	"Light entrepreneurship" with a focus on the execution more than on the idea (concept that has already been tested)
-----------------------------------	--	--	---