

“PARQUESOFT”: A STUDY OF SOCIAL ENTREPRENEURSHIP IN SOFTWARE INDUSTRY CLUSTER IN CALI, COLOMBIA

IVÁN HERNÁNDEZ*
UNIVERSIDAD NACIONAL DE COLOMBIA

FERNANDO ALEMÁN**
UNIVERSIDAD MILITAR NUEVA GRANADA

JENNIFER TABORDA***
UNIVERSIDAD MILITAR NUEVA GRANADA

Recibido: 27 de octubre de 2006

Aprobado: 24 de noviembre de 2006

Resumen

El cambio institucional ocurrido en los últimos años en los países en desarrollo como Colombia soporta y legitima actividades productivas e innovativas. Pero esta dinámica reciente ha sido ignorada; por el contrario la literatura en ciencias sociales se ha concentrado en el estudio de las actividades destructivas y criminales. El problema de estudio es entender cómo en países como Colombia, el desarrollo de sectores industriales formales como el software se basa en las redes informales existentes, las cuales emergen como una respuesta a las sociedades exclusivistas pre-industriales. En particular entender cómo el “Efecto Tunel”, término introducido por Albert Hirschman en los 70’s, emerge como una organización alternativa para coordinar recursos productivos en sociedades inequitativas. El estudio de caso es sobre Parquesoft, un ejemplo de esta nueva industria formal en Colombia basada en un grupo diferente de valores y objetivos que marcan la diferencia en la manera de hacer negocios y pensar el desarrollo.

Palabras Clave: Parquesoft, emprendimiento, industria del software, cluster, cambio institucional.

Abstract

The institutional change in occurred in the last years in developing countries like Colombia supports and legitimizes innovative and productive activities. But this recent dynamic has been missed; instead social science literature has been focused on the study of destructive and criminal activities. The study problem is to understand how in countries like Colombia, formal industrial sectors such as software development rely on existing informal networks, which emerged as a response to stringent and exclusivist pre-industrial societies. And in particular how the “tunnel effect”, term coined by Albert Hirschman in the 1970s, emerges as an organization alternative to coordinate productive resources within unequal societies. The study case is about Parquesoft, an example of this new formal industry in Colombia based in a different group of values and objectives that makes the difference in the way to make business and think the development.

Key words: Parquesoft, entrepreneurship, software industry, cluster, institutional change.

* Phd en Economía, Manchester University; Profesor Asociado, Universidad Nacional de Colombia. Correo electrónico: idhernandezu@unal.edu.co.

** Estudiante del Doctorado en Ciencias de Gestión Universidades de Rouen, París XIII y Nacional de Colombia. Docente- Investigador de la Facultad de Ciencias Económicas, Universidad Militar Nueva Granada. Correo electrónico: faleman@umng.edu.co.

*** Economista, Universidad Nacional de Colombia. Investigadora de la Facultad de Ciencias Económicas, Universidad Militar Nueva Granada. Correo electrónico: jennifer_taborda@yahoo.com.ar.

Introduction

The information and communication technology (ICT) paradigm could be at present, according to Perez (2002), going through its synergy period¹. The constituent institutions within this period are related to high interactions, externalities and increasing returns in economic activity. In this same fashion, according to Nelson and Sampat (2001) and Lundvall (2004), these interactions take the form of “social technologies” and “organizational technologies” that accompany the physical technologies or technological innovations diffusion throughout firms, markets and other institutions in society. This paper studies the “embeddedness” argument (Grannovetter, 1985; Markusen, 1994) and Perez’s, Nelson’s and Lundvall’s “social and organizational technologies and institutions”, emerging in the way of inter-personal, inter-firm and international social networks (and other variety of social capital) in a South American developing country like Colombia, particularly, in its infant and innovative software industry (Bortagaray, 2004).

The change in the institutional framework in developing countries like Colombia, in the last decade or so, supports and legitimizes innovative and productive activities. Unfortunately, social science literature has been focused on the study of destructive and criminal activities. This has missed recent important micro-phenomena at the institutional and social structure level, which constitute the undermath of transforming social and economic forces.

Our study problem is to evaluate how, in developing countries like Colombia, formal industrial sectors such as software development rely on existing informal networks, which emerged as a response to stringent and exclusivist pre-industrial societies. And in particular how the “tunnel effect” (i.e. social mobility through organized entrepreneurial forces), term coined by Albert Hirschman in the 1970s, emerges as an organization alternative to coordinate productive resources within unequal societies.

During the last 50 years, Colombia has transformed itself from a mostly rural-populated country to a mostly urban-populated. Big cities such as Bogotá (Capital city), Cali (in the Valle Department), and Barranquilla (in the Atlántico Department) have had disproportionate levels of (net) immigration, due to several complex factors such as a peripheral industrialization process and a rural conflict that has spanned almost 60 years. This structural change in the population from rural to urban majority placed under pressure cities’ capacity to absorb labor force- concentrated in the big cities like Bogotá, Cali, Medellín and Barranquilla.

While migrants spend great part of their lives (and even the lives of their children and grandchildren) within the reserve pool of labor in order to supposedly obtain better opportunities for a formal job, resources for survival come from temporary, unreported and unprotected activities. This is why increasing immigration and the incapacity of the formal sector to absorb the new labor force, end up in high levels of informality, especially since the 1950s (Bushnell, 1993). The main 10 cities have accounted for increasing rates of informality and unemployment since 1950s reaching their peak levels in the late 1990s (over 50% and 20% respectively). As a result, the informal sector surfaced as a common pattern within the social structure as a consequence of a formal society unable to include the most vulnerable and marginalized sectors.

The emergence of an illegal sector, especially since the 1970s, evolved readily within this context of sustained growth of the informal sector, neglected from any State protection or control since the 1950s. According to Rubio (1997) big cities that traditionally had been an example of regional manufacturing and economic development like Bogota, Cali and Medellín had become centers of greater violence since the 1970s.

The beginnings of the drug trafficking in Colombia date from the 1960s, but it was only until the seventies that the production and commercialization of marijuana activated, as a response to the demand from the

¹ It happens right after the frenzy and recession periods (Perez, 2002).

USA market. The origin of the "Cartels" of the drug date in the following order: Organization of the Valley of the Cauca, the Cali Cartel (1970) Organization in Antioquia, the Medellín Cartel (1976), The Ochoa Clan (1976), The Bogotá Cartel (1976) OAP1: The Armenia-Pereira Cartel (1978) The Leticia Cartel CA1 and the Atlantic Coast (Reveiz, 2006).

The conformation of these highly divided and fragmented (formal, informal and illegal) sectors corresponds roughly to the period between the 1950s and the 1970s in urban cities, although highly framed by a long-standing patronage system inherited from the XIX century. The following historical phase started approximately in the 1970s, with a snowballing informal economy. State's ability to enforce laws, or to gain respect and loyalty through commands, was extremely deterred given its neglect (and even support) to illegal activities.

The de-legitimacy process of an exclusive State and individualistic elites generated the co-evolution of a process of alternative social regime with its own rules: lack of loyalty to the nation, as a whole, and strong loyalties to the family and other groups like cliques that are seen as necessary to survive a hostile environment. This kind of social structures legitimately arose as networks that guaranteed individual compliance within the societal group.

We will present several stages in the evolution of the institutional framework of networks that harnessed, in the first stage, destructive activities, but have evolved, at least to some degree, into innovative activities related to the software sector.

1. First Phase: Crime "Bubble", and "Costly" Formality

Once predatory and rent-seeking behavior became the norm to transfer arbitrary privileges of state and social

elites, it snowballed into a social "bubble", which consists of a dishonesty trap where it is legitimate to break the rules that had favored a traditionally privileged class (Thoumi, 1995). Society enforced this "breaking the rules" as social mobility, given a sustained exclusivist society and given that the formal way of social progress became extremely costly, especially when no ties or affinity to elites existed. Under this state of affairs, the controlling power of the State remains powerless.

1.1 Inverse relation between growth in formal and illegal sectors

The disorganization theory might help us explain a more static analysis of empirical evidence. Criminal activities rise during the majority of the industrial manufacturing recessions over the period, and –vice versa– decay when industrial manufacturing thrived. This inverse relationship between the growth in economic and criminal activities establish an interesting problem. Figure 1, poses formal and illegal sectors as competing for flexible reserves of labor within the informal sector (relations B and F). This means that when the formal sector is unable to absorb idle reserve labor, then the illegal sector presents itself as an interesting alternative for under or unemployed sectors of society. This sustained informal sector poses a latent societal dichotomy: to continue finding a way to finally immerse in productive and growth activities –such as those studied by Portes, Castells, and Benton (1989)² – or finding a way in other paths that would allow their survival or even greater level of income at a lower cost. Namely, *informal and productive entrepreneurial dynamism would be the former way and criminal entrepreneurial dynamism would be the latter* (Baumol, 1990, 1993). In few words, a persistent and sustained informal sector for decades can either burst in favor of society, by finally immersing in productive society or, on the contrary, slowly divert against society, immersing in criminal activities.

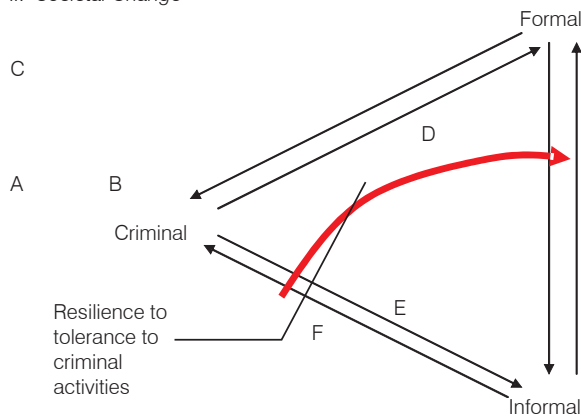
² There are three types of informal economies: survival, dependent exploitation, and growth (Portes, Castells, and Benton 1989). The self-construction of shelter and the proliferation of street vending in cities of the Third World are commonly cited as examples of the first type. The relationships between underground immigrant subcontractors, jobbers, and large firms in the U.S. apparel industry provide an example of the second. The highly successful networks of artisan microproducers in central Italy represent an instance of the third (Capecchi 1989).

Figure 1.
Types of Economic Activities and their Interrelationships

I. Definitions:
+ = Licit
- = Illicit

Process of Production and Distribution	Final Product	Economic Type
+	+	Formal
-	+	Informal
-	-	Criminal

II. Societal Change



- A. State interference, competition from large firms, sources of capital and technology.
- B. Cheaper consumer goods and industrial inputs, flexible reserves of labor.
- C. State interference and disruption, supplies of certain controlled goods.
- D. Corruption, "gatekeeper's rents" for selected state officials.
- E. Capital, demand for goods, new income-earning opportunities.
- F. Cheaper goods, flexible reserves of labor.

Source: Castells and Portes, 1989, p.14

The following section will deal with a historical analysis of the evolution of social structure in a Latin

American country as Colombia, showing that organized criminal sectors would constitute a social viable alternative *after* (not before) the perpetuation of an idle, unprotected and vulnerable social sector such as the informal economy. They might co-exist at present, but the origin and evolution are dissimilar.

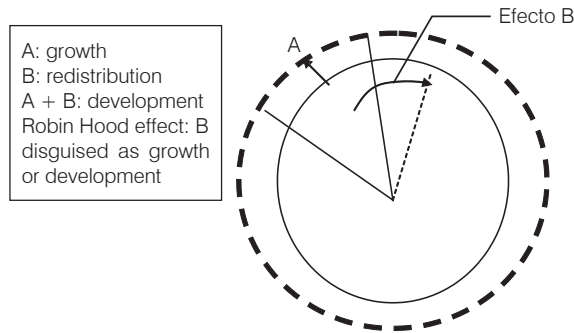
In sum, when the ability of networks to maintain social control is lost (Bursik and Grasmick 1993), a new (destructive) type of networks arise that channel crime within the context of a population's labor instability Bursik and Grasmick.

The social network *failure*, derived in a *tolerance* with illegal activities due to the lack or weakness of means for social control. The increase in expectations for social advancement under a weakness to confront organized crime, generated a social "bubble" in which stepping down from an informal job into a formal job was (and still is) costly³. Whilst stepping down from informality into a criminal activity (or simply suspending exit from the informal sector) constituted a viable way for social mobility. Crime seemed, at least in its first phase, "to pay" integrating a greater part of society in comparison to the formal sector.

Moreover, since the main market of illegal drugs were rich countries; a type of "Robin Hood" effect (see Figure 2) reinforced the tolerance with illegal activities because it supposedly contributed to a wealth transfer from rich to poor countries. However, it did not take many years before realizing that this wealth transfer from rich to poor countries actually was a fallacy, and a "Reverse Robin Hood Effect" ensued. It became evident that the Robin Hood Effect consisted actually of type of entrepreneurship, namely destructive entrepreneurship (Baumol, 1990, 1993) that preys upon its own population and, especially, on productive entrepreneurship (Figure 2).

³ The challenges of launching a business in Colombia are relatively costly respect to other Latin American countries as the World Bank's Report "Doing Business" (2006) shows (www.doingbusiness.org). Entrepreneurs can expect to go through 13 steps to launch a business over 44 days on average, at a cost equal to 19.8% of gross national income (GNI) per capita. The difficulties that employers in Colombia face in hiring and firing workers are the following. The indexes assign values between 0 and 100, with higher values representing more rigid regulations. The Rigidity of Employment Index is an average of the three indices. For Colombia the overall index is 27.

Figure 2.



2. Second Phase: Resilience Against Crime

In the second phase, starting around the end of the 80s, the “spell” was broken, reflected in a period of great economic and social deadweight during the 1990s. This resilience flourished specially when it became evident that illegal activities used costly means for society like violence, co-action for “capturing” public resources, taking control of the natural resources, redistributing income and wealth preying upon their own population, obtaining high utilities by non-declared activities and tributary evasion, the capture of the State and the economic benefits of the violence, and generating high costs of security and justice. Once the society spotted this false “Robin Hood effect”, a subsequent reversal of expectations of social promotion through criminal activities sufficed. The stepping down from informality to criminal activities began, at least partially, to be offset (Figure 1).

3. Third Phase: The Tunnel effect

In this third phase the focus of expectations turn around from the informality → criminal activities as social promotion, to a focus on the informality → formal activities as social promotion (Figure 3). Like

in the beginnings of the industrialization process in mid-twentieth century, the cultural value of productive entrepreneurship is recovered but with a main difference: the social tilt, rather than the individual type, of entrepreneurship.

The huge pool of idle or underemployed “reserve army”, represented in a sustained social inequality and a networking society, might have evolved and transformed itself, especially in urban cities, into entrepreneurial forces of growth. De Soto (1989, 2003) has extensively shown that informal enterprise represents the irruption of real market and development forces. However, as we have shown previously, these entrepreneurial not necessarily are productive entrepreneurial forces, or at least, there must be some conditions through which these forces could be channeled productively.

As we shall see, clustering organizations such as Parquesoft rely on the informal economies of *growth* (see Portes, Castells, and Benton 1989 and Portes and Haller 2003)⁴ given the necessary level of coordination between formal organization and informal networking. The formal sector and the illegal sector compete for -parodying Marx- a “flexible reserve army” (Relations B and F of Figure 1 - II) that are provided by the informal sector and, in turn, adopting its institutional rules of trust and networks. The informal economy is dependent on social ties for its effective functioning. Granovetter (1985) labeled these social ties as “the problem of embeddedness” and are used for transactions “where the only recourse against malfeasance is mutual trust by virtue of common membership in some overarching social structure” (Portes and Haller 2003).

3.1 Coming to the point: The tunnel effect

The complex relation between individual advancement and the social impact it generates, is framed under the term social entrepreneurship. The interviews and surveys done to entrepreneurs and staff in Parquesoft, as we shall see, in some way capture

⁴ Informal economies of growth. They may be organized for capital accumulation by small firms through mobilization of their solidarity relationships, greater flexibility, and lower costs.

the balance between the advance at both the individual and the group level, coined by Hirschman under the term “tunnel effect”.

The *tunnel effect* is a phenomenon -according to Hirschman- which counteracts the *envy effect*, which is generated, in principle, when one perceives that the others are advancing or doing better than oneself. The tunnel effect consists of taking into account what is happening to my neighbor as an indication of what the future might have in store for me. Suppose that the individual has very little information about his future income, but at some point a few of her relatives, neighbors or acquaintances improve their economic or social position. Now she has something to go on: expecting that her turn will come in due course, she “will draw gratification from the advances of others *–for a while*” (Hirschman and Rothschild, 1973, p. 545).

Hirschman and Rothschild (1973) emphasize the difference between various “theories of success”. If individual advances are attributed primarily to chance,

the success of others will occasion the tunnel effect; “for the next time fortune strikes, I may well be the lucky one”. In this case, if there exists the belief that the world is governed by chance, then the *tunnel effect* is considered a valuable -though volatile- resource to achieve growth. If, on the other hand, success of others is likely to be attributed to affinity (i.e. nepotism, favoritism, familism) rather than to, for example, “capabilities” there would not be any “initial feeling of anticipatory gratification among those who are not participating in the division of the spoils”.

Parquesoft resembles, not the chance or the affinity case mentioned previously, but rather a case of mobility based on the “capability” or “capacity” to generate success via the tunnel effect or *social entrepreneurship*. This institutional change –due to historic forces of resilience to the tolerance to social mobility via illegal activities– recovers the effort, hard work and informal networking, as cultural values in which social entrepreneurs, as we shall see below, rely as coordinating devices in the software industry.

Figure 3.
Cultural and Social Change: Creative destruction Vs Destructive creation

(a) Period 1970s-1990s
Criminal “Bubble”

FORMAL SECTOR			CRIMINAL SECTOR	
Culture	Social Structure		Culture	Social Structure
Necessary Conditions: trust, hard work and effort	Individual entrepreneurship: industrial elite	Destructive creation VS. Creative destruction (bubble effect in the right hand side)	Tolerance to illegal transfer of arbitrary privileges	Cartels, Killer and kidnapping networks
Social Exclusion			Easy money, apparent inclusive activities	
	Destructive (negative) loop			Selfinforcing (positive) loop

Figure 3.
Continuación

(b) Period 1990s-2000s
Tunnel Effect

FORMAL SECTOR			CRIMINAL SECTOR	
Culture	Social Structure		Culture	Social Structure
Necessary Conditions: trust and hard work and effort	Social entrepreneurship: Parquesoft	Destructive creation VS. Creative destruction (tunnel effect in the left hand side)	Tolerance to illegal transfer of arbitrary privileges	Cartels, Killer and kidnapping networks
Social Mobility and Impact			Social costs (i.e. violence, killer networks, cartels, kidnapping, rampant delinquency)	
	Selfinforcing (positive) loop			Destructive (negative) loop

4. Case Study: Parquesoft

4.1 A brief on History

During 1997, social entrepreneur in software industry and founder of companies like Open systems and Parquesoft Orlando Rincon, visited Ireland and India, two countries transformed into global leaders and with very similar conditions as Colombia at the time. He observed it was possible to build up, with a relatively low investment, a Technological Cluster of Software. The idea was to replicate in Colombia the independent enterprises concept which share spaces and support services, interact and make business between them. Parquesoft's start-up investment was around US\$150.000 together with a donation of Orlando's old headquarters (worth US\$30,000). It started by incubating three start-ups with 20 individuals and now they have helped create 200 companies with more than 1000 individuals. In 1999, Parquesoft's enterprises netted US\$100,000 in revenues; by 2004, that figure was US\$6 million. Their goal for 2008 is to double the companies and

involve 3000 individuals more and generate more than US\$100 million in sales. They opened two international offices in Miami and in Silicon Valley. They count with more than 800 software developers and diverse alliances with regional universities. They have also strategic alliances with Microsoft, IBM and Oracle and they work in diverse topics as optic software and bioinformatics. This proved to be an excellent opportunity for the city of Cali, which had been embedded in a significant economic crises and social identity, given the perverse impact of illegal drug cartels in the 80s and 90s (Parquesoft 2006).

Business elites of the Valle del Cauca, during the decade of the 1970s and until, approximately, the first half of the 1990s, co-existed or co-evolved with "other industrialists" associated with illegal drug cartels. The latter are characterized by Baumol (1990, 1993) as "destructive" industrialists or "predators" given their innate culture to use illegitimate means like corruption and violence and other illegal activities, so as to fulfill their ends⁵. It was not until the end of the 1990s and early stages of 2000 that

⁵ The "other industrialists" are classified as predators because there is an absence of an ethos regarding the 'public service' which prevents its members of differencing between the collective and the individual interests. All this would endure the coexistence with illegal drug trafficking and the public management of resources (Urrea y Mejia, 2000, p. 169).

society and organizations like *Parquesoft* could overcome this artificial co-existence with the “other industrialists” by recovering their historical values rooted in a strong social entrepreneurship culture (Urrea y Mejía, 2000).

The organization of *Parquesoft* is based on models of social ventures, led by exceptional, visionary individuals; and developed into self-sustained organizations, widely recognized as being both socially and economically successful. They pool financing sources for start-ups and R&D projects and in which profits are reinvested in newcomers. It is, in other words, a “pay-it-forward” type of model which builds up a spiral of start-ups and innovation projects, generating externalities and social capital for all incumbents.

4.2 *How it does it?*

The particular characteristics of *Parquesoft* make it a sustainable alternative of development; but ¿What kind of conditions are these? The following lines describe some of them. The park has a networking organizational structure with a good balance between flexibility and control. Strong relations between park’s enterprises and persistent interaction at inside characterize the existence of well-built links in the network, therefore the information flows much well than in other kind of organizational structures. *Parquesoft*’s strategy is spontaneous and informal; there is no plan that establish responsibilities and resources for each strategy; it arises from the impulse of develop and exploit its resources and abilities. The park’s principal strength is its intangibles resources because the work revolves around the entrepreneurial ideas and the knowledge networks (Salcedo, 2004).

There is no promotional advertisement to attract entrepreneurs. Young people arrive to the park after heard about it through their friends and acquaintances, “the ideas, motivation and ability to take initial risk without economic rewards are the kind of condition that evaluates the committee” (Interview: *Alfredo Roldán*). The biggest proportion of beginners on *Parquesoft* is young people; this has an additional deep reason: young people are a population’s critical mass in Colombia and require

the appropriate spaces to build its future (Claros, 2006). The most important compromises of entrepreneurial community are of qualitative type; they need to have a strong identification with park’s philosophy, hard work, and built respectful relationships based in trust.

Trust between *Parquesoft*’s members is a great force; the agreements and contracts (even in business) are paperless; verbal agreements are the rule. Achievements and results is all that matters. Local government, associations and private sector have a main role as allies and collaborators. The conjunction of tangibles and intangibles resources gives to *Parquesoft* unique abilities like team work, high learning curves, coaching, managing to achieve good contacts, good adaptation to changes, specialization and economy (Salcedo, 2004).

4.3 *Opinion Survey to Parquesoft agents*

With the intention to test the previous characteristics of *Parquesoft* and its relationship with the social impact of *Parquesoft* in its environment. It was made a opinion survey to *Parquesoft* members (Park director, Consulting member or *Parquesoft* Entrepreneur, Enterprising, Beneficiary, Associated enterprise or Others) looking to know the personal experience of members in the everyday work in *Parquesoft* and their opinion and perception about the values, resources and social impact of *Parquesoft*. The survey had 27 questions distributed in 4 groups: personal information, experiences since entry to the park, experiences in the work with *Parquesoft* and Personal opinion. The survey was made via e-mail by official communication through *Parquesoft* during august of 2006. It includes answers of five kinds of agents; the first category: Park director, Consulting member or *Parquesoft* Entrepreneur there’s 2 answers; 18 answers on second category: Enterprising, one on Beneficiary category, 8 on fourth category: Associated enterprise and 2 classified like other.

The data analysis used was Qualitative Comparative Analysis using Fuzzy Sets. And data processing was made using fs/QCA 2.0 (Windows program for crisp and fuzzy sets) (Ragin, Kriss, Sean, 2006). This kind of method for social data analysis is use-

ful when the number of cases is short because the analysis is both intensive -addressing many aspects of cases- and integrative -examining how the different parts of a case fit together, both contextually and historically. Two types of solution for each model were made, truth table solution is more stringent and fuzzy sets solutions seek a wider point of view. The solution presents sufficient and necessary conditions but not causal relationships.

The original questions in the survey were put in different categories like conditions and the options in grades of membership scores in the interval 0 and 1 according with a fuzzy sets classification of membership. In order to explain the sources of social impact, the analysis seeks logical relations in different impact levels. The variables were reorganized into 8 groups or models; the first 5 models test the perception about social impact with regard to combinations of conditions related with the institutional rules of Parquesoft and immediate impacts over the agents and their environment; these rules reflects the firm's values and principles of action. The remaining models test specific firm impacts in the exercise of particular capabilities.

In brief, according to the Boolean analysis there are more restrictive conditions that are required as necessary and/or sufficient in order to have a social impact. Fuzzy set analysis instead "dims" a bit this radical approximation, pointing out less restrictive conditions in order to generate social impact. The Boolean analysis points out a more complex and restrictive set of conditions, but the fuzzy set analysis pins down which are the variables that we cannot disregard in the case of study as necessary conditions. For the study case, these critical variables are: trust and hard work and effort. Without these cultural variables, organizations such as Parquesoft probably would not be able to generate a social impact. This is why trust and hard work and effort are considered extremely important for Parquesoft's objectives.

5. Conclusions

The evolution of an unequal society like Colombia has followed a cultural and social change leading to

a tension between productive and destructive forces. Given that individual entrepreneurs linked to social and State elite drove society in the past through an exclusive formal industrial sector, a tolerance to illegal means for social advancement ensued. Self-enforcing mechanisms like the "Robin Hood" effect (wealth transfer from rich to poor countries through illegal psychoactive drug-dealing) and an apparent inclusive re-distribution of wealth, created the collective "illusion" of a new viable way for social enhancement. This collective chimera did not last especially when social costs became evident.

During the period 1990s-2000s (Figure 1 (b), the *Tunnel Effect*, term coined by Albert Hirschman and Rothschild (1973), in social organizations such as *Parquesoft* began to rise. The tunnel effect generated significant social impacts through social, rather than merely individual, entrepreneurship.

The embeddedness argument presented by Granovetter (1985) manifests in *Parquesoft* through networks tightly knitted with schools of marginalized sectors in Cali coupled with their own entrepreneurial schools. These schools recruit students, allowing them to learn and cooperate with previously trained entrepreneurs, but under the condition of sharing their experience and knowledge in the future

The institutional framework for cooperation of *Parquesoft* is a "pay-it-forward" or social entrepreneurship type of model. It is a continuum of recovering and development of values and norms of cooperation, trust, effort and hard work, commonly found in developing countries marginalized population, a socially enriching learning process expanding in a transversal sector such as software development. The social entrepreneurial role plays an important part coupled with an institutional framework of embedded activities drawing from social values and networks.

Why the software industry? Not only for technological reasons but also because it is a knowledge or human based sector, generating social mobility and, because it is transversal, it permeates all industrial sectors generating self – enforcing loops. *Parquesoft* has a particular characteristic that makes it different to others alternatives like formal and traditional ac-

tivities or illegal activities (drugs traffic). Trust, hard work and effort, networks and cooperation systems are their guiding values and principles of action. A non-contractual relationship governs the everyday operation; it leads to a social inclusive model in which all levels of society have a place.

The big difference that Parquesoft's model offer young people in relation to illegal activities model is that it offers a new way to see business from a social standpoint; looking for an income and wealth redistribution like a main objective. In other kind of models the redistribution and the social intention are just secondary goals.

The existence of Parquesoft does not imply that legal activities are disappearing –far from it. It just indicates the emergence of new micro – social phenomena that induce changes in the economic and social structures. This is why we emphasize in the coexistence and tension between Destructive Creation and Creative Destruction. However, the usual international image portrayed in the media (and almost anywhere) is that there only exist a rampant illegal bias, which is neglecting an important social micro phenomenon that has generated important economic changes, in particular through new technologies like software industry.

References

- Baumol, W.J. (1990) (with Stephen M. Goldfeld, Lilli A. Gordon, and Michael F. Koehn) *The Economics of Mutual Fund Markets: Competition versus Regulation*. Norwell, Mass.: Kluwer Academic Publishers.
- Baumol, W.J. (1993) *Entrepreneurship, Management, and the Structure of Payoffs*. Cambridge, Massachusetts: MIT Press.
- Bortagaray, I (2004): "Scientific research collaboration in South America as reflected in the SCI". In: S. Hemlin; C. M. Allwood; B. R. Martin (Eds) *Creative Knowledge Environments: The Influences on Creativity in Research and innovation*. Cheltenham, UK - Northampton, MA, USA: Edward Elgar, 174-192.
- Bursik, R. J. and Grasmick, H (1993) *Neighborhoods and Crime: The Dimensions of Effective Community Control*. New York: Lexington Books.
- Bushnell, D. (1993) *The Making of Modern Colombia: A Nation in Spite of Itself*. University of California Press: Berkeley, CA.
- Claros, J. (2006). "Espacio para el emprendimiento". En: *Revista Estrategia & Negocios*. Miami y Centroamérica. Junio.
- De Soto, H. et.al. (1989) *El otro sendero. La Revolución Informal*. Lima.
- De Soto, H. (1989). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Grannovetter M. (1985) "Economic Action and Social Structure: The Problem of Embeddedness". In: *American Journal of Sociology* 91 (1985): 481-510.
- Hirschman, A. and Rothschild, M. (1973). "The Changing Tolerance for Income Inequality in the Course of Economic Development". In: *The Quarterly Journal of Economics*. Vol. 87, n. 4 Nov. Pp 544-566.
- Lundvall (2004) "Why the New Economy is a Learning Economy". In: *Danish Research Unit For Industrial Dynamics*. Druid Working Paper No 04-01.
- Markusen A (1994) "Studying Regions by Studying Firms". In: *Professional Geography*, April.
- Nelson R. and Sampat B. (2001) "Making Sense of Institutions as a Factor Shaping Economic Performance". In: *Journal of Economic Behavior and Organization* 44:31-54.
- Parquesoft (2006) www.parquesoft.com
- Perez C. (2002) *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Edward Elgar Publishing.
- Portes, A and Haller W. (2003) "The Informal Economy." In: *Handbook of Economic Sociology*. New York: Russell Sage Foundation (forthcoming).
- Portes, A, and Schauffler R. (1993). "The Informal Economy in Latin America: Definition, Measurement, and Policies". In: *Population and Development Review* 19(1).
- Portes A, Castells M, and Benton L. (1989) *The Informal Economy: Studies in Advanced and Less Developed Countries*. USA: Johns Hopkins University Press.
- Ragin, C. (2006). *User's Guide to Fuzzy-Set/Qualitative Comparative Analysis 2.0*. Tucson, Arizona: Department of Sociology, University of Arizona.
- Ragin, C., Kriss A. and Sean, D. (2006). *Fuzzy-Set/Qualitative Comparative Analysis 2.0*. Tucson, Arizona: Department of Sociology, University of Arizona.
- Reveiz, E. (1997) *El Estado como mercado. La gobernabilidad económica y política en Colombia*. Bogotá: Fonade-Carlos Valencia Editores.
- Rubio (1997) "Nuevos espacios productivos: tecnología, industria y servicios en la región de Madrid, Ciudad y Territorio". En: *Estudios Territoriales* vol 29 Número 112 pág 357-378.
- Salcedo, C. (2004) *Buenas ideas + accion = innovación: estudio de caso Parquesoft. Tesis de grado administración*. Bogotá: Universidad de los Andes.
- Thoumi F (1995) *Political Economy and Illegal Drugs in Colombia*. Boulder: Lynne Rienner.