Analytical, Descriptive and Exploratory Study: Challenges in the Implementation of Commercial Cluster Integration: Taking CELAC's Firms' as the Research Case

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The main idea of this dissertation is to provide an understanding conception to implement a commercial cluster platform, with the support of Latin American Emerging markets (Brazil and Mexico), where Brazil is part of BRIC (Brazil, Russia, India, China) and Mexico in 2005 was considering as developed major economy. As a consequence, the countries integration network becomes part of the supply chain. Driving FTA (Free Trade Agreement) between CELAC (*Community of Latin American and Caribbean States)* and other economic groups should be mentioned. This study research explains the reason why it makes great sense that, the commercial clusters platform should go through with other supply chains. On this present study, the aim is to define commercial cooperation and understand the relationships between firms and enterprises resources planning (ERP); to build business-processing reengineering (BPR) and understanding its relationship with the supply chain; following the methodology to test several hypotheses with logit model, including the vector analysis behaviors to determine an impact of explanatory variables on the study probability. Study findings suggest that firm's regional supply chain strategy should be integrated with marketing, production and financial strategies supported by regional governments. Below, you will be provided with a regional implication as productivity improvement, as well as markets satisfaction.

Keywords: Firms, Supply Chain, Commercial Cluster Integration, Risk, CELAC, FTA

Introduction

A Commercial Cluster Integration, which has a close relation with supply chain, consists of a number of partners or components (such as suppliers, manufacturers, distributors and customers) in the same region (Latin America and the Caribbean Countries).

This research describes the development of an integrated framework for Commercial Cluster Integration, and contributes to the Conceptual knowledge of potential improvements and developments in commercial processes. The framework becomes a foundation for model developments in many industry applications, using individual networks.

Background of this study

Today's international Firms are realizing that the form of independent and/or autonomous cooperation is rapidly vanishing. This shows that one firm can no longer by itself (monetarily and/or organizationally) enter into international market, to maintain competitive in developing international supply chain. All these relevant issues are prompting many firms to generate a mutual commercial networking cooperation. As a method to respond to challenges of entering new markets with better products, the international market requests firms to integrate a commercial network partnership to share the risk and, hence be competitive in commercial networking platform (Eisenmann et al., 2006). Collaborative methods as Joint Venture (JV's) are not new.

Today different Industrial Firms realize that a go-it-alone strategy is not a stable strategy at the global market. As a result, that which began in 1980's with several consequences – enlargement foreign competition, soaring investment cost, shortened life products cycles and the ever growing demand for new potential market – clusters, are interesting on the commercial strategy (Prahalad et al., 2001), and, commercial networking integration platform should be a strategy for the future (Rick, 2013a, p.103-121).

These processes with the goal to share common risk and international market environment, strategic international networks are cropping up all across the globe. A cluster of commercial strategic network platform is a relationship between two or more countries, to pursue a set of agreed goals or to meet a critical international market; sharing knowledge or resources, solution that could be beneficial to all countries involved on the commercial cluster integration as platform.

On one occasion (1980-1990), Japanese Firms celebrated over five hundred (500) commercial

clusters with United States Firms (Prahalad et al., 2001). Moreover, the goal of cluster network was also perceived.

APEC (Asia-Pacific Economic Cooperation) is another example that we can mention about commercial cluster integration networking cooperation in different areas such as promoting FTA (Free Trade Agreement) and international economics as mentioned by S. Rick Fernandez (2013:156), throughout the Asia – Pacific Region. APEC countries network was established in 1989, involving the growing of Asia-pacific economies and the advent of regional economic blocs (such as the EU).

The key point of countries commercial cluster integration network has been valuable with the reason to develop political and regional commercial economic resources, and to give a chance to every single country to raise their own internal economic potentiality.

According to the afore provided understanding and support from previous studies, regional or economic groups should integrate and compete as economic countries group and join a fruitful strategic commercial cluster, reaching to the same or similar objectives.

Table 1. Common objective on strategic CCII-commercial cluster integration initiative platform

1. Increase the productivity of the group companies	2. Drive innovation in the field
3. Encourage new enterprises in the field	4. Reduce opportunistic behavior
5. Increase the pressure of coordination between undertakings	6. Advancement
7. Sharing production	8. Research facilities, and the international supply chain market to ensure market growth

Sources: Rick (2013a, p.104).

Significance to economy

Economy

This study project gives significant contribution not only to firm's growth but also increase regional governments economics and offer the latter participation on how to reduce their unemployment rate as well as develop innovative R&D for the sake of the regional firms (CELAC, 2011) and commercial purposes.

The highly positive role displayed by the region in international and regional affairs and expresses its convincement that the creation of CELAC, 2011, will contribute "significantly to the strengthening of the union and coordination among countries of the region, so as to jointly address world challenges". As evaluated in the following table 2 (S. Rick Fernandez, 2013a, p.103-121), demonstrate that the Latin American Economic Group will become relevantly important worldwide with the total amount of each variable.

H01. Firms will enter a commercial network with government support and became more dynamic in an international strictly regulated and potential market, if firms enter a network it will help to participate in the platform.

Table 2. Indicate the country's global position (Potential Regional Market)

Country	Area Km2	Population 2011	GDP (PPP) million 2010	GDP Per Capita	HDI	FSI	CPI	IEF	GPI	WPFI	DI	Income Inequality
Antigua and Barbuda	443	87,884	1,425	16,400	0.764	59.9	N/A	N/A	N/A	N/A	N/A	N/A
Argentina	2,780,400	41,769,726	596,000	14,700	0.797	46.8	3	51.7	1.852	16.35	6.84	45.8
Bahamas	13,880	313,312	8,921	28,700	0.771	56.5	7.3	68	N/A	N/A	N/A	N/A
Barbados	430	286,705	6,227	21,800	0.793	52.8	7.8	68.5	N/A	N/A	N/A	N/A
Belize	22,966	321,115	2,651	8,400	0.699	67.7	N/A	63.8	N/A	N/A	N/A	N/A
Bolivia	1,098,581	10,118,683	47,880	4,800	0.663	82.9	2.8	50	2.045	28.13	5.92	57.3
Brazil	8,514,877	203,429,773	2,172,000	10,800	0.718	65.1	3.8	56.3	2.04	16.6	7.12	53.9
Chile	756,102	16,888,760	257,900	15,400	0.805	40.7	7.2	77.4	1.71	10.5	7.67	52.1
Colombia	1,138,910	44,725,543	435,400	9,800	0.71	87	3.4	68	2.7	51.5	6.55	58.5
Costa Rica	51,100	4,576,562	51,170	11,300	0.744	50.6	4.8	67.3	1.681	8.08	8.04	50.3
Cuba	110,860	11,087,330	114,100	9,900	0.776	76.6	4.2	27.7	1.964	78	3.52	N/A
Dominica	751	72,969	758	10,400	0.724	N/A	5.2	63.3	N/A	N/A	N/A	N/A
Dominican Republic	48,670	9,956,648	87,250	8,900	0.689	76.9	2.6	60	2.125	26.13	6.2	48.4
Ecuador	283,561	15,007,343	115,000	7,800	0.72	82.2	2.7	47.1	2.116	27.5	5.77	49
El Salvador	21,041	6,071,774	43,570	7,200	0.674	76	3.4	68.8	2.215	15.83	6.47	46.9
Grenada	344	108,419	1,098	10,200	0.748	66.4	N/A	N/A	N/A	N/A	N/A	N/A
Guatemala	108,889	13,824,463	70,150	5,200	0.574	80.1	2.7	61.9	2.405	20.25	6.05	53.7
Guyana	214,969	744,768	5,379	7,200	0.633	72.6	2.5	49.4	2.112	16.63	6.05	43.2
Haiti	27,750	9,719,932	11,480	1,200	0.454	108	1.8	52.1	2.288	16.38	4	59.5
Honduras	112,090	8,143,564	33,630	4,200	0.625	78.3	2.6	58.6	2.327	51.13	5.76	57.7
Jamaica	10,991	2,868,380	23,720	8,300	0.727	67.1	3.3	65.7	2.244	7.67	7.21	45.5
Mexico	1,964,375	113,724,226	1,567,000	13,900	0.77	75.1	3	67.8	2.362	47.5	6.93	51.7
Nicaragua	130,370	5,666,301	17,710	3,000	0.589	81.2	2.5	58.8	2.021	22.33	5.73	52.3
Panama	75,420	3,460,462	44,360	13,000	0.768	57.8	3.3	64.9	1.812	21.83	7.15	52.3

Paraguay	406,752	6,459,058	33,310	5,200	0.665	72.4	2.2	62.3	1.954	16.25	6.4	52
Peru	1,285,216	29,248,943	275,700	9,200	0.725	73.6	3.4	68.6	2.077	30	6.4	48
Saint Kitts and Nevis	261	50,314	684	13,700	0.735	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Saint Lucia	616	161,557	1,798	11,200	0.723	N/A	7	70.8	N/A	N/A	N/A	42.6
Saint Vincent and the Grenadines	389	103,869	1,069	10,300	0.717	N/A	5.8	66.9	N/A	N/A	N/A	N/A
Suriname	163,820	491,989	4,711	9,700	0.68	71.1	3	53.1	N/A	11.5	6.65	52.8
Trinidad and Tobago	5,128	1,227,505	26,100	21,200	0.76	63.7	3.2	66.5	2.051	8.5	7.16	N/A
Uruguay	176,215	3,308,535	47,990	13,700	0.783	40.4	7	70	1.521	11.75	8.1	42.4
Venezuela	912,050	27,635,743	345,200	12,700	0.735	78.2	1.9	37.6	2.403	47.33	5.18	43.5
CELAC[a]	20,438,217	591,662,155	6,451,341	10890.9	0.710	69.2	3.91	60.4	2.08	25.31	6.36	50.40
				359,400	23.4	2007	113	1,813	48.0	608	152	1159.4

Sources: Wikipedia, & Rick, (2013a, p.106).

In fact, regional agreements are addressed by countries (CELAC, 2011) as significant devices in market opportunisms (Gal breath & Galvin, 2006). However, in potential market uncertainty, governments are necessary to implement bilateral relation with a potential market as seen (e.g. FTA developed between two countries). Firms need to coordinate trading agreements with firms that have similar challenges in the supply chain, and in that way, firms involved can gain efficiency in opportunism (Reagans & McEvily, 2003); Rick (2013:156).

This trustworthiness shows the significant advantage in reducing opportunism and direct cost. This is supplemented by the idea that trust induces more sharing of information, reduces uncertainty and reduces control (Berthon et al., 2003).

Society and Academic:

A strategic cluster platform should become one of the most significant issues in strategic initiative literature.

We can notice that a strategic cluster network among countries worldwide has been dramatically implemented over the last decades, and this interesting study has followed suit Zhou and Benton (2007), Li and Lin (2006).

As was addressed by S. Rick Fernandez, (2013a, p.103-121), study "will enhance the actual knowledge of Commercial Cluster Integration strategic" for developing international markets, and the results from the study will be useful for scholars who are interested to get more understanding and innovate on this theoretical and practical field. Entrepreneurs, investors or existing firms will be able to apply this information in planning, reforming, and developing their commercial resources.

Domestic and Foreign general Situation

Integration network have been focused on developed international markets. However, few works have been centered on the Commercial Cluster Integration network implementation strategies of international markets, as the focus of this special innovation international market research, which arises from the international economic crisis, e.g. CELAC, 2011. In this Region, the specific economic situation has led regional Latin American and the Caribbean presidents to consider establishing a regional economic group (Community of Latin American and Caribbean States (CELAC)) as an appropriate tool for developing and implementing strategies for commercial integration development, as required by this study.

Every new enterprise that joins the regional commercial integration network must provide and share its enterprise history with the member of the commercial cluster integration network. The lack of transparency on the platform is requested for the essential opportunistic inclinations to carry out mutual benefit. This situation demands the firms to grow R&D in market research and to reduce each enterprise´s fear on opportunism issues. One way for accomplishing this is by establishing commercial integration network structures (Hypothesis 1). In fact, the results support this hypothesis. Thus, it is important to point out here that regional firms prefer to develop international market with their national or regional enterprises cooperation in the form of Commercial Cluster Integration to avoid the risk of opportunism from their members.

H02: Firms will enter a commercial network with government support and become more dynamic in an international, strictly regulated and potential market, if they make essential coordination in implementing commercial clusters

H03: Firms will enter a commercial network with government support and become more dynamic in an international, strictly regulated and potential market, if they make important capital investment in assets, by implementing commercial platform.
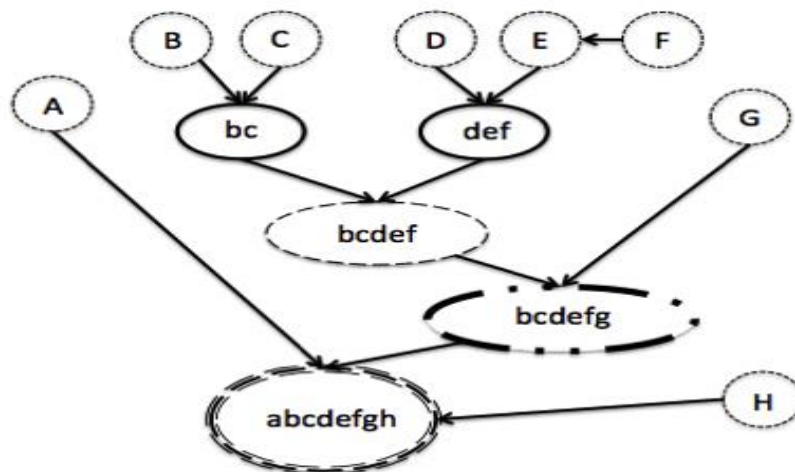

Figure 1. Commercial Cluster Network Platform Model. Source: Rick (2013b: p.301)

This movement along the continuum of commercial integration structures hierarchy has a cost that is not always considered in the implementation network. The potential costs of the hierarchy have been generally ignored; probably because the transaction costs literature has not spelled them out properly beyond generic references (to bureaucratic costs). Property Right Theory allows for the consideration of this cost because it takes into account the international market of residual decision rights among members structure (Regional firms and government system). The implications of this assignment could mean that the structure selected for implementing commercial integration agreement is the structure suggested to better meet Transaction Cost Economics. Furthermore, a number of aspects such as trust, reciprocity and/or forbearance could mean that, to reach a structure closer to hierarchy, commercial cluster integration network implementation is necessary.

To provide a broad theoretical understanding on this study, the perspective to look at different aspects that could be related to the selected implementation structure in international market development where the integration network agreement will interact with every member, as presently named in figure 6, the Transaction Value Theory that adds the consideration of the future integration benefits of the commercial network development. Intuition says that although in the Transaction Cost Economics perspective, the structure of Commercial Cluster Integration network should be closer to the international market. The consideration by every member of the future regional integration network benefits could make this structure a relevant issue. The result of the integration agreement could be higher as well as the indirect government structure system support as suggested by the Transaction Cost Theory and/or the Property Right Theory, noted by Li and Lin (2006).
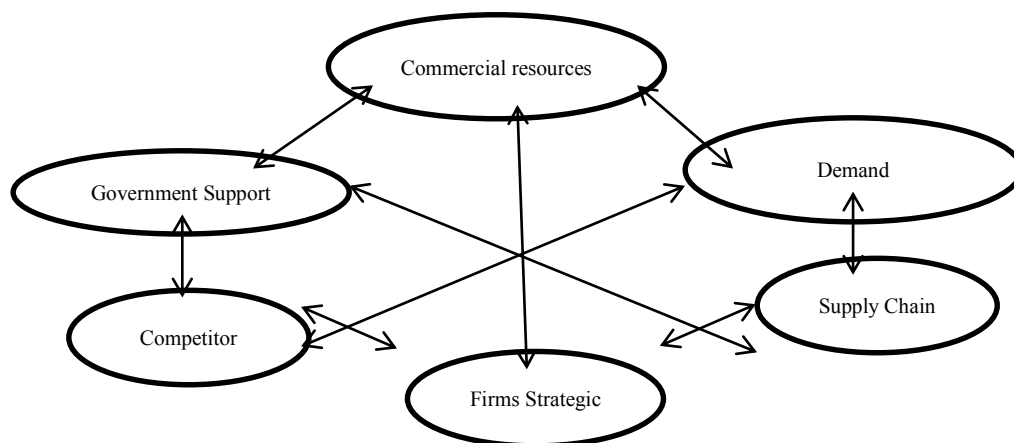

Figure 2. Enterprises Networking & Cluster Environment: Source: Rick (2013a: p.112),

Moreover, in order to implement cluster integration network, it is necessary to analyze countries economic capabilities on several measurements such as technology, R&D, Commercial Balance, Investment level as so on, in order to freely join the integration. These parameters are influencing factors to develop commercial cluster integration platform seeking immediate competitive advantages in the focus market. In this sense, each party can contribute to the specific commercial resources with an objective to gain competitive advantage or even to help each other with products and market expansion (Prahalad et al., 2001).

Literature Review

More recent literature presents studies about learning methods based on implementing clusters in

different industries (Grunert & Valli, 2001; Dussauge et al. 2000). It addresses the way countries and Firms should build up to increase their production, productivity, as well as their own competitiveness. One can therefore use local, national and international clusters outcomes as indicators of studies of countries integration to examine international commercial relationship and outcomes.

Over the last 10 years, there has been considerable attention placed on the changes occurring in the Firm's environment of particular interest has been change in the nature of relationships. The new forms of relationships have referred to partnerships (Aaker et al., 2004), (Hennig-Thurau et al., 2002 & Gremler), (Garbarino & Johnson, 1999), (Schau, Muñiz, Arnould, 2009), (Fournier & Lee, 2009), (Zhang & Bloemer, 2008); network, argued by Agndal and Axelsson (2002, p.

448), Erramilli, & D'Souza (1993), Oviatt, & McDougall et al. (1994), Bell (1995), Poon and Jevons (1997) and Coviello & Munro (1997); and in this point and commercial integration (Hu, Lin, & Chang, 2005; Chen, and Shyu, J.Z. (2005).

Studies on clustering in different industries have increasingly attracted the attention of academics, policy makers, trade practitioners and international organizations in the last two decades (Pilkington, 1999). Its spread has led to a rise stream of research by strategy and organizational scholars who have considered several causes and criteria of such agreements. It can be noticed that scholars, who have studied in the area of clusters, have given a lot of different definitions to these agreement relationships. This theoretical understanding has explored a number of definitions of cluster on commercial integration network coming from different theoretical framework definitions that tend to highlight specific features of cluster to explore challenges to sign up a FTA as was argued by (S. Rick Fernandez, 2013:156) between CELAC (*Community of Latin American and Caribbean States*) and Individual Country or between Economic groups (S. Rick Fernandez, 2013a: p.103-121).

This theory is usually referred to as the internationalization theory in the international trade relation literature (Stauss & Schoeler, 2004; Johnston, 2001; (Rick, 2013a: p.103-121). The term has been employed extensively in order to evaluate firms and multinational companies' performance (Paik et al., 2000). TCT argues that regional integration networks and commercial cluster integration platform involve transaction costs. Regional integration network transaction costs are higher than that of commercial cluster integration platform. Conversely, it is also true that integration networks between regional integration and commercial cluster integration platform performance is moderated by the transaction costs of collaboration network to the transaction costs of internalization.

Research Methodology

To date, a researcher has been proposed to implement a commercial clusters implementation (Rick 2013a: p.103-121), which shows the economic group (CECLAC, 2011) jointly developing a massive commercial integration in other markets. There are several FTA from Latin American countries, which at the moment are running with several markets. However, an existing study that has considered a commercial cluster integration platform across the New Latin American Economic Group (CELAC, 2011) which propose to integrate CELAC countries as commercial platform in order to enter with greater force with investment size, target market knowledge, production levels, as

well as international logistics supply chain. In fact, there is little literature to display this type of study focused on commercial cluster integration – platform implementation, which in this case study is related among firms of CELAC economic group and other supply chains. Therefore, this study is designed with two different purposes: on one hand, to be an exploratory research into the commercial cluster integration – platform implementation by firms of (CELAC, 2011) economic group and other supply chain; and on the other hand, to be an explanatory research where government networking support (CELAC, 2011) must be an essential part in international politics relation.

The criteria of industry selection in this study are from the main commercial clusters implementation by CELAC countries and other markets. This is the main purpose for developing a potential market by Latin American & firms that would grow their productivity levels in other supply chains and application-oriented basis in the forms of new product development and innovation. Most of the agreements are bilateral FTA-based between two countries; an example can be seen in the author's book (S. Rick Fernandez, 2013:156). The questionnaire study show the fact that, governments must support group enterprises cooperation in order to improve wellness in international markets competitiveness and productivity. Thus, the sample of implementing commercial network, where regional firms and governments are engaged in international market development responsibilities through an agreement based on R&D sponsorship for commercial purposes, is the aim of this study (develop supply chain in other markets).

As follow and be supported by previous study (S. Rick Fernandez, 2013a: p.103-121), one can check out the viability to implement commercial cluster integration between regional firms in LAC (33 Countries), which has been analyzed on the following table on the firm's participation.

Characteristics of the firms and respondents

The last part of the questionnaire focused on characteristics of the firms as well as characteristics of top management or questionnaire respondents. The firms' characteristics considered are: Firms experiences in the market, Employability, and commercial sector. These characteristics have been used as control variables in the analyses because of their potential effect on partner behavior and satisfaction.

Firms Experiences in the market

The age of the firm may have an influence on the firm's ability to learn about commercial cluster integration between firms at the regional economics group. S. Rick Fernandez, emphasized that (S. Rick

Fernandez, 2013a: p.103-121), it could be argued that, the greater the duration of the integration, the greater the learning would be from the firms integration. At the same time, the long-terms agreement would also increase the probability to interact on the international commercial risk. Firms with more experience in international markets issue will have more advantage, and in other way, younger firms would have higher capabilities to get richer in internationalization clusters knowledge (Table 3).

Table 3. Age of Firms (Exploratory Latin American Firms)

Firm Experiences in the Market	No. Firms	%	CCI		Non-CCI	
Less than 10	66	38%	28	16%	38	22%
Between 11 – 20	70	40%	24	14%	46	26%
Between 21 – 30	18	10%	5	3%	13	7%
More than 31	20	11%	1	1%	19	11%
Total	174	100%	58	33%	116	67%

Employment Rate

The size of a firm can affect its market power and thus its ability to dominate the commercial integration. Because of this, bigger firms (Table 4) are more likely to perform in significant ways into consideration than smaller firms, at the time of the moment of the entry in the internationalization of regional commercial cluster integration. Although in this study one can use proxies as well as the total number of employees and also the common one should be the revenues. Furthermore, total number of employees is often highly correlated with total annual revenue. Therefore, the number of employees as a control variable has been used in this study as can be seen in the following table.

Table 4. Size of Latin American Firms

Employability	No	%	CCI	%	Non-CCI	%
0-50	99	57%	42	24%	57	33%
51–100	33	19%	8	5%	25	14%
101–250	18	10%	4	2%	14	8%
251-500	14	8%	2	1%	12	7%
More than 501	10	6%	2	1%	8	5%
Total	174	100%	58	33%	116	67%

Industry sector

It is believed, as other authors have highlighted, that the type of industry influences establishing commercial clusters has significant firms decisions. An example, the study from Hitt et. al. (2001) argued that the type of industry affected the criteria used to make acquisition decisions. A number of others (Porter, 1991) have argued the importance of industry (Table 5) type, in determining the strategies employed by firms. For the purposes of this study the groups depend of firm's activities, according of SIC (Standard Industrial Classification), CELAC countries have been implemented this standard sources production, as can be seen in the following table:

Table 5. Firms Industry

Commercial Sector	No	%	Response		Non-Response	%
Production Firms	125	40%	79	25%	46	15%
Commercial Firms	99	31%	45	14%	54	17%
Services Firms	45	14%	27	9%	18	6%
Exporting Firms	32	10%	14	4%	18	6%
Importing Firms	15	5%	9	3%	6	2%
Total	316	100%	174	55.10%	142	44.90%

The results show that 40% of the firms participating in this research belong to the production sector and 31% to the commercial sector. This means that CELAC countries have potential resources to integrate a common commercial objective to join solutions to the questions of this study, and use this 71% sources as well as the 14% of services firms to promote and get strong support.

Conceptual Research Purpose

S. Rick Fernandez, (2013a: p.103-121), proposed an operational framework for addressing production and distribution problems in supply chain. The framework is related to integrated firms from regional economic groups and builds a commercial clusters platform (market, manufacturer and distributor), with the goal to cooperate within regional firms at overseas markets. The interest in commercial clusters and related logistics issues has also led many companies to analyze their commercial clusters network in terms of players, activities and tools/techniques involved (Simchi-Levi et al., 2000). This is mainly due to the deregulated markets, globalization and a commercial environment that is conducive to integration, cooperation, and information sharing and Information Technology support. Commercial Cluster Integration Initiative is becoming more crucial for the survival of a world-class enterprise. With the advances in Information Technology, there has been a shift of research focus on Supply Chain Management in terms of framework, concept and model development.

The Commercial Cluster Integration Initiative literature confirms the view that integration of various components involved in a commercial clusters network should be carried out, so that integration provides visibility, flexibility and maintainability of components involved at the structural level. The implementation and maintenance of commercial clusters could be made simple for Small Medium Size Enterprises (SMEs).

Conceptual Framework

As final consideration, the commercial cluster integration platform between countries looking for market opportunities (CELAC, 2011) and potential and strict market have to be stimulated on the SMEs, by helping growth and forming dynamic cooperation between each other. This commercial cooperation between the parties involved is considered an engine of growth and innovation.

As shared previously, commercial cluster integration provides an effective means to improve the regional economies and the commercial methods (Ireland, Hitt, Camp, & Sexton, 2001). That seems to be the real reason why it is considered an attractive point for each single country. However,

despite such advantages, commercial strategic networks do not always achieve their desired results. Uncertainty about members´ behavior can be a cause for significant concern, thus principal issues are unstable and conflicting for the integrating countries (CIS, 2003, 2006). Although strategic cluster integration should become increasingly important, on occasions there can be some dissatisfaction with actual outcomes relevant to expectations that on statistical reports seem not to be successful (Davidow, 2003; Charlett et al., 1995). However, it is difficult to clarify precise failure rates. Strategic networks are likely to have high breakdown rates (Solvell, Ketels, and Lindqvist, 2008). Understanding the issues involved with implementing strategic cluster integration platform in the market (CELAC, 2011) could be a significant contribution to this research.

H04: Firms will enter a commercial network with government support and become more dynamic in an international strictly regulated and potential market, if they make important implementation in incentive and motivation.

H05: Firms will enter a commercial network with government support and become more dynamic in an international strictly regulated and potential market, if they provide satisfaction for each other in commercial cluster integration.

Methodology used in hypothesis test

To test the hypotheses, this research shall use the *logit* model. Let x_i be the synthesis of a collaboration agreement i where: $x_i = \beta y_i + \varepsilon I$

The vector y_i includes all the variables (proxies) representing opportunistic behavior (together with possible control terms); the vector β includes the weights attached to each variable representing such opportunistic behavior; and εI is the error term.

The theoretical model assumes that the unobservable variable x_i determines the choice of one governance form as it falls in one of the following discrete intervals:

i) *If $x_i < \mu_0$, Separated Ownership (=0) is selected*
ii) *If $\mu_0 < x_i$, Joint Ownership (=1) is selected*

The logit statistical analysis estimates the vector of parameters β taking into account the observed characteristics of the collaboration y_i. It assumes that the underlying probability distribution of εI is normal. The logit choice model provides statistical methodology, based upon the comparison of the utilities associated with each of the alternative governance forms, given a vector of the collaboration's characteristics. In probabilistic form, the model is expressed as follows:

$P_{ij} = P(G=j/y_i) = e^{\alpha j y_i} / \Sigma_k e^{\alpha k y_i}$

Where *P_{ij}* is the probability that collaboration I is governed by structure j, $j = 0, 1$; αj is a vector of coefficients which determine the impact of the explanatory variables on the probability that each of

the governance forms will be selected. The variation of *aj* across governance forms is consistent with the assumption that the utilities are different for each of them.

To estimate the coefficient αj the utility of one of the alternatives is used as a normalization value. In this case, the alternative will be the Separated Ownership.

Therefore, the parameters of the other alternatives have to be interpreted in reference to the omitted one. A particular value of one estimated coefficient *alj*, indicates the extent to which the attribute l of the collaboration contributes to the utility of governance alternative *j = 1*, beyond the contribution that this attribute would have in determining the utility of the base option, Separated Ownership. If the base option for comparison is Separated Ownership, then it should be expected that the likelihood of choosing the other governance form different from the base option at lower levels of opportunism decrease.

At the same time, the likelihood of choosing Joint Ownership compared with Separated Ownership, as opportunistic behavior increases, should increase; therefore, αI > 0 is expected.

Findings

The study was designed to investigate challenges of implementing commercial cluster integration. Research findings are presented in following tables.

Table 6. Survey Specific Response Result

		Less	More
1	1. Share Information	19%	81%
	2. Trust	81%	19%
2	1. Growth	29%	71%
	2. Cooperation	71%	29%
3	1. Being productive	55%	45%
	2. Being competitive	45%	55%
4	1. Marketplace	67%	33%
	2. Supply Chain	33%	67%
5	1. Commercial group	55%	45%
	2. Joint Venture	45%	55%

Sources: Author Calculation Data, (2013), Survey Specific Response Measure

The measures used were designed to examine conditions of regional firms (CELAC, 2011) and possibilities to implement commercial cluster platform with governments support. The data were collected from Latin American and the Caribbean firms viewpoints, through e-mail surveys. However, the in-depth interview was mostly conducted from firms' perspectives and commercial clusters behavior. Thus, the use of an informant "speaking" on behalf of the integration network and answering question of decision-making and international market was developed. In addition, Lambe et al., 2002, p.141-158, stated that although researchers widely recognize the value of relevant data from firms that are using commercial network, the difficulties associated with gathering and using such data are so great. As a matter of fact, most studies involving firms network were used to gather enterprises information accordingly to implement the project of this study (Menon, Geeta, Barbara Bickart, Seymour Sudman, and Johnny Blair. 1995, p.77-84).

Table 7. Mail survey results

Description	Quantity	%
Questionnaire sent (1)	226	
Undeliverable questionnaires	18	8%
Received questionnaires(1)	111	49.1%
Questionnaires sent for follow-up	108	47.8%
Questionnaires received(2)	74	32.7%
Total questionnaires sent(1)-(2)	316	
No response	131	41.5%
Response	185	58.5%
Decline to participate	4	1.27%
Unusable	7	2.22%
Completed questionnaires	174	55.1%

Sources: Rick (2013a: p.117).

Summary

It is generally assumed that Commercial Cluster Integration firms must invest in R&D activities to help integration member's open markets and reduce international market risk behavior. One cannot leave behind several important aspects such as trust. In this sense, Das and Teng, (2002); Freel (2000); Hoang and Antoncic's (2003) confirm that as uncertainty, complexity, and economic transactions go on within and among firms growth, it becomes increasingly important for scholars to understand developmental procedures of equity, trust and procedures in market integration.

The empirical results support the predicted network between trust and regional government structures. This integration is consistent with the idea that trusts have strong opportunistic behavior, encourages member receptivity regarding firms' integration advice, and reduces monitoring costs in member's participation. In this research, the finding of trust, measured by the regional firms origin, influences the choice of the government system support. Therefore, commercial firms integration may perceive regional integration network as the government system that provides more advantages in international markets, and will be preferred when firms are more allied. The main reason would be that market behavior effects increase the benefits of commercial integration network compared to those of individual firms cooperation related to the benefits when these effects are absent. As a consequence, the general presumption that "trust" may reduce the need of hierarchical controls will become an explanation for why firms rely on commercial integration. This point is supported by the data of the present study.

Also, it is important to point out that frequent and accurate communication network among firms and their members leads to a common market objective, which creates a greater trust due to the growing firms network on sharing market information. In this way it is more likely to understand each other's needs and develop system integration behavior (McAllister, 1995). The relationship between trust and formal, as well as non-formal integration network agreement is a complex and dynamic one, and can have different meanings in atmospheres of trust.

Listing of the main conclusions

In order to study the relationship between international market behavior, implementation structure and industries as well as enterprises satisfaction, the Transaction Cost Theory and the Property Right Theory several limitations as a theoretical framework are observed. A theory considering future benefits of the overall integration network (e.g. Transaction Value Theory) can perfectly add the traditional theoretical

framework because it allows dynamic aspects in the analysis. The study shows that these three theories Transaction Cost Theory, PPT, and Transaction Value Theory are well integrated in explaining the structure adopted for implementation commercial cluster integration in terms of the costs of introducing hierarchical monitoring (by regional governments) and the value of the net benefits in the structural selection.

Limitations

Due to this existence of a cross-sectional study, the ability to draw causal inferences is limited. In fact, a number of researchers such as Kuei-Hsien, N., Miles, G. and Chung-Shing, L. have mentioned that the commercial integration network proposed in this study may be more complex than that suggested in the theoretical framework. For instance, research has suggested that as trust improves, firms are more willing to communicate in order to develop outlined objectives, thus creating an interactive, interlocking process between these variables Kuei-Hsien, Miles, and Chung-Shing, Acknowledging these limitations and insisting on the conclusion, it can be noted that this study contributes to the understanding of the satisfaction that regional firms and governments network platform can experience at the moment they decide to become members of commercial integration platform agreements. Specifically, this study suggests that the regional enterprises satisfaction with the commercial cluster implantation will depend directly on the characteristics and capabilities of the firms themselves and other factors associated with the integration network as government network. The present study considers that the integration network between satisfaction and the structure of the selected strategic cluster should not be directly analyzed because the structure is endogenous to the characteristics of the geographical clusters.

Future research

However, it is possible that, the estimation of reliability may be somewhat exaggerated. This is a relatively new view on regional commercial integration research, and of course, there is a need for further research to detail the measurement of the main development, as study to implement an FTA between Economic groups

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