# Retos

Revista de Ciencias de la Administración y Economía





Universidad Politécnica Salesiana del Ecuador



Revista de Ciencias de la Administración y Economía

Año VII, Número 14, octubre 2017-marzo 2018

ISSN impreso: 1390-6291 / ISSN electrónico: 1390-8618

La Administración de RETOS se realiza a través de los siguientes parámetros:

La revista utiliza el sistema anti plagio académico





Los artículos cuentan con código de identificación (Digital Object Identifier)



El proceso editorial se gestiona a través del Open Journal System



Es una publicación de acceso abierto (Open Access) con licencia Creative Commons



Las políticas copyright y de uso post print, se encuentran publicadas en el Repositorio de Políticas de Autoarchivo SHERPA/ROMEO.

Los artículos de la presente edición pueden consultarse en: http://revistas. ups.edu.ec/index.php/retos

Retos está indexada en las siguientes Bases de Datos y sistemas de información científica:

### **BASE DE DATOS SELECTIVAS**







### PLATAFORMAS DE EVALUACIÓN DE REVISTAS



### **DIRECTORIOS SELECTIVOS**





### HEMEROTECAS SELECTIVAS





### BUSCADORES DE LITERATURA CIENTÍFICA OPEN ACCESS





### POLÍTICAS DE COPYRIGHT DE LAS EDITORIALES Y AUTOARCHIVO



### OTRAS BASES DE DATOS BIBLIOGRÁFICAS



Portal de Difusión de la Producción Científica



### CATÁLOGO DE BIBLIOTECAS INTERNACIONALES UNIVERSITARIAS































































Rector
Javier Herrán Gómez, sdb
Vicerrector General Académico
Luis Tobar Pesántez
Vicerrector Docente
Fernando Pesántez Avilés
Vicerrector de Investigación
Juan Pablo Salgado Guerrero

Vicerrectores de sede César Vásquez Vásquez (Cuenca) José Juncosa Blasco (Quito) Andrés Bayolo Garay (Guayaquil)

«Retos» es una publicación científica bilingüe de la Universidad Politécnica Salesiana de Ecuador, editada desde enero de 2011 de forma ininterrumpida, con periodicidad fija semestral (1 de abril y 1 de octubre), especializada en Desarrollo y sus líneas transdisciplinares como Administración Pública, Economía Social, Marketing, Turismo, Emprendimiento, Gerencia, Ciencias Administrativas y Económicas, entre otras. Es una Revista Científica arbitrada, que utiliza el sistema de evaluación externa por expertos (peer-review), bajo metodología de pares ciegos (doble-blind review), conforme a las normas de publicación de la American Psychological Association (APA). El cumplimiento de este sistema permite garantizar a los autores un proceso de revisión objetivo, imparcial y transparente, lo que facilita a la publicación su inclusión en bases de datos, repositorios e indexaciones internacionales de referencia. La Revista se edita en doble versión: impresa (ISSN: 1390-62911) y electrónica (e-ISSN: 1390-8618), en español e inglés. Todos los artículos están disponibles en la Web de la revista (http://retos.ups.edu.ec).

Domicilio de la publicación: Universidad Politécnica Salesiana del Ecuador, casilla postal 2074, Cuenca-Ecuador. Teléfono (+5937) 2050000. Fax: (+5937) 4088958. Correo electrónico: revistaretos@ups.edu.ec

© RETOS. Revista de Ciencias de la Administración y Economía. Impreso en Ecuador

Los conceptos expresados en los artículos competen a sus autores. Se permite la reproducción de textos citando la fuente. Los artículos de la presente edición pueden consultarse en la página web de la Universidad.

### Consejo de Editores

#### **EDITOR JEFE**

Dr. Luis M. Romero-Rodríguez

Universidad Internacional de La Rioja, España

### **EDITORES ADJUNTOS**

- · MSc. Andrés Bayolo Garay, UPS, Ecuador
- MSc. Fabricio Freire Morán, UPS, Ecuador
- MSc. Javier Carrera Jiménez, UPS, Ecuador

### **EDITORES TEMÁTICOS**

- Dra. Iria Puyosa, Universidad Central de Venezuela.
- · Dr. Armando Chaguaceda, Universidad de Guanajuato, México.

### Consejo Científico

- Dr. Michele Bagella, Universidad Tor Vergata de Roma, Italia
- Dra. Sofía Vásquez Herrera, UPAEP, México
- Dra. María Cristina Vallejo, Flacso, Ecuador
- Dr. Javier Rojas Villanueva, UNMSM, Perú
- Dr. Alfonso Moro, Radio France International
- Dr. Andrés Rosas Wulfers, Pontificia Universidad Iaveriana, Colombia
- Dra. Judith Cavazos Arroyo, UPAEP, México
- Dr. Ángel Cervera Paz, Universidad de Cádiz, España
- · Dr. Ebor Fairlie Frisancho, UNMSM, Perú
- Dr. Eduardo Dittmar, Universidad Autónoma de Chile
- Dra. Rosa de las Nieves Galaz, UPAEP, México
- · Dr. Geovanny Herrera Enríquez, ESPE, Ecuador
- Dr. Pedro Tito Huamaní, UNMSM, Perú
- Dr. Guillermo Gutiérrez Montoya, Universidad Don Bosco, El Salvador
- Dr. Mario Humberto Hernández, UNAM, México
- Dra. Pilar Marín, Universidad de Huelva, España
- Dr. Augusto Hidalgo Sánchez, UNMSM, Perú
- Dr. Mario Lagunes Pérez, UPAEP, México
- Dra. Jenny Vargas Portillo, Universidad Autónoma de Chile
- Dr. José Albuja Salazar, ESPE, Ecuador
- Dr. José Lázaro Quintero, Universidad Nebrija,
- Dr. Luis Cruz Soto, UNAM, México
- Dr. Pablo Mauricio Pachas, UNMSM, Perú
- · Dr. Rodrigo Muñoz Grisales, Universidad EAFIT, Colombia
- Dr. Víctor Manuel Castillo, Universidad de Guadalajara, México
- · Dra. Tania Chicaiza Villalba, Universidad Politécnica Salesiana, Ecuador
- Dra. Rebeca Martínez Sánchez, Unam, México
- Dr. Rodrigo Mendieta Muñoz, Universidad de Cuenca, Ecuador
- Dr. Vlashkiv Mosquera Aldana, UPAEP, México

- Dr. Edgar Izquierdo Orellana, Espol, Ecuador
- Dr. Alberto Arroyo Picard, UAM, México
- · MSc. Carlos Izquierdo Maldonado, UPS, Ecuador
- MSc. Fernando Barrera Salgado, UPS, Ecuador
- MSc. Juanita Salinas Vásquez, UPS, Ecuador
- · MSc. Marcelo Yánez Pérez, Universidad Católica Silva Henríquez, Chile
- Msc. Vanessa León León, Espol, Ecuador
- MSc. Oscar William Caicedo Alarcón, Universidad EAFIT, Colombia
- MSc. Pedro Montero Tamayo, UPS, Ecuador.
- MSc. Raúl Álvarez Guale, Universidad Politécnica Salesiana, Ecuador

### Consejo Editorial Institucional **UPS**

### CONSEJO DE PUBLICACIONES

- Dr. Javier Herrán Gómez, sdb.
- Dr. Juan Bottasso Boeti, sdb.
- MSc. Juan Pablo Salgado Guerrero.
- Dr. Luis Álvarez-Rodas.
- MSc. Fabricio Freire-Morán
- MSc. José Juncosa Blanco MSc. Jaime Padilla Verdugo
- Dra. Floralba Aguilar Gordón
- MSc. Sheila Serrano Vicenti
- MSc. John Calle Sigüencia
- MSc. René Unda Lara
- MSc. Armando Gijalva Brito
- MSc. Andrea De Santis
- MSc. Mónica Ruiz Vásquez

### EDITOR GENERAL UPS

Dr. Luis Álvarez-Rodas

### CONSEIO TÉCNICO

MSc. Tania Barrezueta Cabrera Dr. Ángel Torres-Toukoumidis

### SERVICIO DE PUBLICACIONES

Hernán Hermosa (Coordinación General)

Marco Gutiérrez (Soporte OJS)

Paulina Torres (Edición)

Martha Vinueza (Maquetación)

Raysa Andrade (Maquetación)

### TRADUCTOR

Joaquín Crespo

### **EDITORIAL**

Editorial Abya Yala (Quito-Ecuador) Avenida 12 de octubre N422 y Wilson, Bloque A, UPS Quito, Ecuador. Casilla 17-12-719

Teléfonos: (593-2) 3962800 ext. 2638

Correo electrónico: editorial@abyayala.org

# UNIVERSIDAD POLITÉCNICA SALESIANA DEL ECUADOR

Javier Herrán Gómez, sdb

### Rector

© Universidad Politécnica Salesiana Turuhuayco 3-69 y Calle Vieja Casilla postal 2074

Cuenca, Ecuador.

Teléfono: (+593 7) 2 050 000

Fax: (+593 7) 4 088 958

E-mail: srector@ups.edu.ec

**CANJE** 

Se acepta canje con otras publicaciones periódicas

Dirigirse a:

Secretaría Técnica de Comunicación y Cultura

Universidad Politécnica Salesiana Av. Turuhuayco 3-69 y Calle Vieja

Casilla postal 2074

Cuenca, Ecuador.

PBX: (+593 7) 2 050 000 - Ext. 1182

Fax: (+593 7) 4 088 958

Correo electrónico: rpublicas@ups.edu.ec

www.ups.edu.ec

Cuenca - Ecuador

# Índice

FIVE POLITICAL REGIMES IN LATIN AMERICA, INTERNET FREEDOM	1
AND MECHANISMS OF CONTROL	
THE TELECOMMUNICATIONS REFORM IN MEXICO 2014.  AN ANALYTICAL APPROACH	
VIGIL AND SURVEILLANCE: A CONTENT ANALYSIS OF THE NATIONAL REGISTRY OF INTERNET ACCESS IN BRAZIL	
Level of use of social networks in the communication process In the micro and small sized enterprises of Cuenca	
The Investment in advertising and its effect on the Medium  Enterprises of Guayaquil	

A theoretical review to improve outcomes of innovation
in enterprises from the perspective of "Happiness Management" $107$
Una aproximación teórica para mejorar los resultados de innovación
en las empresas desde la perspectiva del "Happiness Management  107 Dr. Rafael Ravina Ripoll
Dr. Raguet Ravina Ripoti Dr. Francisco Villena Manzanares
Dr. Guillermo Antonio Gutiérrez Montoya
v
Feasibility analysis in the production of orthopedic footwear for children in the Province of Tungurahua
Análisis de factibilidad en la producción de calzado ortopédico
para niños en la Provincia de Tungurahua
Montenegro-Ramírez, Arturo
Zamora-Sánchez, Ruth
Arias-Villavicencio, Valeria
Would I do it again? Revisiting the implementation
of the entrepreneurship paradigm in a University in Mexico $\dots 137$
¿Lo volvería a hacer? Revisitando la implementación del paradigma
del emprendimiento en una Universidad de México
Oscar Montiel
Claudia Ivette Rodríguez Lucio
Bakery small business in Azuay (Ecuador) and their productivity $\dots$ 155
Microempresas panificadoras en el Azuay (Ecuador) y su productividad 155
Carlos Armando Romero Galarza
Gustavo Geovvani Flores Sánchez Jorge Arturo Campoverde Campoverde
Katherine Tatiana Coronel Pangol
Corporate Social Responsibility in the inclusion of people with Disability. Case Study Ambato Companies, Ecuador
Mejores Prácticas Empresariales de Responsabilidad Social
en la inclusión de personas con discapacidad. Estudio de caso
en empresas de Ambato, Ecuador
Fanny Paulina Pico Barrionuevo
Silvia Susana Torres
Basic writing rules
Normas editoriales básicas

www.retos.ups.edu.ed

# Five political regimes in Latin America, Internet freedom and mechanisms of control

# Cinco regimenes políticos en Latinoamérica, libertad de internet y mecanismos de control

Dra. Iria Puyosa is a professor / researcher at the Central University of Venezuela (Venezuela) (iria.puyosa@ gmail.com) (http://orcid.org/0000-0002-8725-6871)

Dr. Armando Chaguaceda is a research professor at the Division of Social Sciences and Humanities of the University of Guanajuato (Mexico) (xarchano@gmail.com) (http://orcid.org/0000-0002-2497-178X)

### Abstract

Since 2010, there has been a trend towards establishing internet control and securitization policies (Freedom House, 2016). The literature on the subject indicates that the mechanisms of internet control vary according to the type of political regimes. The objective of this work is to verify if the policies of control of Internet in Latin America vary according to the type of prevailing political regime. For the study were selected five Latin American countries that are categorized as examples of different political regimes: Chile, Mexico, Ecuador, Venezuela and Cuba. For each case, the indicators related to freedom of expression on the internet are reported in accordance with the data provided by «Varieties of Democracy». «Freedom on the Net» categorizations are used as a complement. The results indicate that there is a correlation between political regime (measured by polyarchy index) and internet freedom. Indeed the more autocratic the regime is, the more first-generation internet controls are observed, with censorship of contents and violations of users' rights. While in hybrid regimes second-generation controls are more commonly observed, which involve obstacles to access, without reaching content blocking and network outages.

#### Resumen

Desde 2010 se ha observado una tendencia al establecimiento de políticas de control y securitización de internet (Freedom House, 2016). En la literatura sobre el tema se indica que los mecanismos de control de internet varían según el tipo de regímenes políticos. El objetivo de este trabajo es observar si las políticas de control de internet en Latinoamérica varían según el tipo de régimen político imperante. Para el estudio se seleccionaron cinco países latinoamericanos que son categorizados como ejemplos de distintos regímenes políticos: Chile, México, Ecuador, Venezuela y Cuba. Para cada uno de los casos, se reportan los indicadores relativos a la libertad de expresión en internet vigentes de acuerdo con los datos proporcionados por «Varieties of Democracy». Como complemento se usan las categorizaciones de «Freedom on the Net». Los resultados indican que efectivamente existe correlación entre régimen político (medido por índice de poliarquía) y libertad de internet. Mientras más autocrático es el régimen más se observan controles de internet de primera generación, con censura de contenidos y violaciones a los derechos de los usuarios. Mientras que en los regímenes híbridos se observan más comúnmente controles de segunda generación, que involucran obstáculos al acceso, sin que se llegue al bloqueo de contenidos y a los apagones de la red.

### Keywords | Palabras clave

Political regimes, internet, control policies, democracy, authoritarianism, censorship, rights of internet

Regímenes políticos, internet, políticas de control, democracia, autoritarismo, censura, derechos de los usuarios de internet.

### 1. Introduction

At the international level there is a diversity of ways of organizing, within the framework of a national society and State, the access, exercise, ratification and/or withdrawal of political power. Political regimes encompass a continuum that has at one end greater autonomy and citizen rule and in the other the concentrated and non-responsive power of caudillos (strong men), parties and/or cliques. Thus, quality democracies, low-performing polyarchies, delegative democracies, hybrid regimes (competitive authoritarianism), closed authoritarianism, and totalitarian regimes make up the spectrum of political regimes.

Contemporary democracies are regimes that encompass, as basic elements, the characteristics-fair, free, and competitive elections; political pluralism; citizens' rights to organize, information, expression and mobilization; mechanisms of accountability and control of public servants-which Robert Dahl (1989) has identified as constituents of polyarchies-truly existing democracies-; but which can be expanded to include the constitution of quality democracies, with citizenships with broad rights (civil, political, social) and a state apparatus of high capacity, where the exercise of citizenship is protected and empowered (Tilly, 2010). Thus, contemporary democracy brings together both the conquests and demands aimed at greater equity and participation in public affairs, as well as the better quality of political representation and deliberation.

Hybrid regimes (Levitsky & Way, 2010) are those where formal elements of democracy are maintained - elections with a minimum of competition, legal opposition, rights to demonstration, independent media - but within a ruling that gives the rulers- often in the form of a dominant party and a charismatic leader - greater control of institutional, material, communicational resources, which allow him to tilt the field in his favor to the detriment of the opposition.

The autocracies adopt historically diverse clothes, being the types more recognized by the political science: the military dictatorship, the regime of unique party, the sultanism and hybrid modalities of these. In addition, as a result of the experience of the twentieth century, autocracies are subdivided into a majority of authoritarian regimes - with limited pluralism, conservative character and official mentalities - and some totalitarianism - monist, revolutionary and ideological - in both

cases opposed to the liberal republics of the masses (Pérez-Liñán, 2017) commonly called democracies.

### 2. Political control of the internet

As Internet penetration has increased and the growing importance of its political uses has become evident, regimes of all kinds (democratic, hybrid and autocratic) have established policies of increasing internet control and securitization, as reflected in reports of "Freedom on the Net" (Freedom House, 2016). The most obvious control practices are Internet blackouts, content filtering by keywords and DNS URL blocking. As of 2009, second-generation controls are beginning to become generalized, such as: temporary restriction of connectivity in regions where protests occur, just-on-time blocking of mobile applications, informal removal of content from ISPs and site administrators web, slowing of connections in times of high political unrest and establishment of high costs of services to limit mass access to the Internet (Deibert & Rohozinski, 2010; Pearce & Kendzior, 2012; Puyosa, 2015).

In the literature on internet control, evidence is also reported that countries with authoritarian regimes tend to limit the development of Internet access infrastructure and increase controls over service providers (Drezner, 2009). Likewise, there is evidence of control and securitization practices that do not require technical mechanisms, but are based on police, judicial or administrative mechanisms such as: taxes on the use of the internet, administrative requirements for access providers, routine police reports of citizen activity on the Internet and prison for political expression on the web (Drezner, 2010, Kerr, 2014 and Puyosa, 2015). Finally, there are practices of mass monitoring (sometimes seen by the government itself), use of information published online to harass or legally accuse political activists, use of botnets and other forms of automated propaganda, as well as cyber attacks against activists opponents or "patriotic hacking" (Deibert & Rohozinski, 2010, Drezner 2010, Kerr, 2014, Puyosa, 2015, Puyosa, 2017b).

Taking into account the "digital dictator's dilemma" model (Kerr, 2014), it is hypothesized that the traditional mechanisms of keyword filtering and website blocking only become prominent under authoritarian regimes. The mechanisms of first-generation control, keyword filtering and content blocking are considered to be very costly in terms

of international reputation and internal legitimacy, and are therefore avoided by more democratic regimes. Hybrid regimes only use first-generation control mechanisms in times of high political unrest, especially if massive protests that threaten their stability and are amplified by the use of social media.

The model also hypothesizes that the use of second generation control mechanisms is more likely under hybrid regimes and competitive authoritarianism. The increase in Internet penetration and its political uses acts as a trigger for the establishment of second generation control policies (Kerr, 2014; Puyosa, 2015). Hybrid regimes restrict access to content and applications that can help expand online protest or mobilize citizens for off-line collective action. In addition, netbot armies are deployed to inundate social media platforms with pro-government comments, influence online discussions, report or attack anti-government commentaries, or simply post disinformation content (Puyosa, 2015, Puyosa, 2017c, 2017b, Marwick & Lewis, 2017, Puddington, 2017).

## 3. Case analysis

Since the objective of the study is to explore if the policies of control of Internet in Latin America vary according to the type of political regime prevailing in each country, a methodology of sample of typical cases was followed. Five Latin American countries were selected as examples of different types in the continuum of political regimes: Chile (a high quality democracy), Mexico (a low quality democracy), Ecuador (a delegative democracy), Venezuela (autocracy, in transit from competitive authoritarianism to hegemonic authoritarianism) and Cuba (a recent post-totalitarianism). For each case, the type of internet control policies and practices in force are reported according to the data provided by the Varieties of Democracy¹ project database and the Freedom on the Net² annual report.

<sup>1</sup> The V-Dem project is co-organized by the Department of Political Science of the University of Gothenburg (Sweden) and the Kellogg Institute at the University of Notre Dame (USA). The project is a collaboration between more than 50 worldwide specialists and 2,800 country experts. It generates a database annually updated with measurements of variables and indicators related to seven principles of democracy: electoral, liberal, participatory, deliberative, egalitarian, majority and consensual.

<sup>2</sup> Freedom on the Net is an annual report on the state of the internet by Freedom House and a network of local researchers in 65 countries.

In this section of the study, a brief description of the political regime prevailing in each of the selected countries is first presented. Together with the qualitative categorization, we report the V-Dem polyarchy additive index. Second, the data of the V-Dem project on the indicators are presented: i) Government censorship of the internet; (ii) government media censorship; (iii) harassment of journalists; (iv) academic and cultural freedom of expression; (v) repression of civil society organizations in the period 2006-2016. Third is the categorization and score obtained by the country in the Freedom on the Net report (2016), as well as a summary of current policies or practices of major importance and impact<sup>3</sup>.

## 4. Variable description

To verify quantitatively the political regime we are using the additive index of polyarchy of V-Dem. This index responds to the question: To what extent is the electoral principle of democracy achieved? The criteria are that the electoral principle of democracy seeks to achieve responsiveness and accountability between leaders and citizens through the election mechanism. This is supposed to be achieved when the right to suffrage is extended; political organizations and civil society organizations can function freely; elections are clean and not manipulated by systematic fraud or irregularities; and the chief executive of the country is selected (directly or indirectly) through elections. The scale is of interval.

To examine freedom and control of the internet, the study takes data corresponding to the following questions from the V-Dem project (Coppedge et al., 2017):

Question 13.2: Does the government directly or indirectly attempt to censor the print or broadcast media?

Clarification: Indirect forms of censorship might include politically motivated awarding of broadcast frequencies, withdrawal of financial support, influence over printing facilities and distribution networks, selected distribution of advertising, onerous registration requirements, prohibitive tariffs, and bribery. We are not concerned with censorship of non - political topics such as child pornography, statements offensive to a particular religion, or defamatory

<sup>3</sup> Chile is not included in Freedom on the Net reports.

speech unless this sort of censorship is used as a pretext for censoring political speech.

### Responses:

- 0: Attempts to censor are direct and routine.
- 1: Attempts to censor are indirect but nevertheless routine.
- 2: Attempts to censor are direct but limited to especially sensitive issues.
- 3: Attempts to censor are indirect and limited to especially sensitive issues.
- 4: The government rarely attempts to censor major media in any way, and when such exceptional attempts are discovered, the responsible officials are usually punished.

Scale: Ordinal, converted to interval by the measurement model.

Question 13.3: Does the government attempt to censor information (text, audio, or visuals) on the Internet? Censorship attempts include Internet filtering (blocking access to certain websites or browsers), denial-of-service attacks, and partial or total Internet shutdowns. We are not concerned with censorship of topics such as child pornography, highly classified information such as military or intelligence secrets, statements offensive to a particular religion, or defamatory speech unless this sort of censorship is used as a pretext for censoring political information or opinions. We are also not concerned with the extent of internet access, unless there is absolutely no access at all (in which case the coding should be 0).

### Responses:

- 1: The government successfully blocks Internet access except to sites that are pro-government or devoid of political content.
- 2: The government attempts to block Internet access except to sites that are pro-government or devoid of political content, but many users are able to circumvent such controls.
- 3: The government allows Internet access, including to some sites that are critical of the government, but blocks selected sites that deal with especially politically sensitive issues.
- 4: The government allows Internet access that is unrestricted, with the exceptions mentioned above.

Scale: Ordinal, converted to interval by the measurement model.

Question 13.8: Are individual journalists harassed -i.e., threatened with libel, arrested, imprisoned, beaten, or killed --by governmental or powerful nongovernmental actors while engaged in legitimate journalistic activities? Responses:

- 0: No journalists dare to engage in journalistic activities that would offend powerful actors because harassment or worse would be certain to occur.
- 1: Some journalists occasionally offend powerful actors but they are almost always harassed or worse and eventually are forced to stop.
- 2: Some journalists who offend powerful actors are forced to stop but others manage to continue practicing journalism freely for long periods of time.
- 3: It is rare for any journalist to be harassed for offending powerful actors, and if this were to happen, those responsible for the harassment would be identified and punished.
- 4: Journalists are never harassed by governmental or powerful nongovernmental actors while engaged in legitimate journalistic activities. Scale: Ordinal, converted to interval by the measurement model.

Question 10.2: Is there academic freedom and freedom of cultural expression related to political issues?

### Responses:

- 0: Not respected by public authorities
- . Censorship and intimidation are frequent.

Academic activities and cultural expressions are severely restricted or controlled by the government.

- 1: Weakly respected by public authorities. Academic freedom and freedom of cultural expression are practiced occasionally, but direct criticism of the government is mostly met with repression.
- 2: Somewhat respected by public authorities. Academic freedom and freedom of cultural expression are practiced routinely, but strong criticism of the government is sometimes met with repression.
- 3: Mostly respected by public authorities. There are few limitations on academic freedom and freedom of cultural expression, and resulting sanctions tend to be infrequent and soft.
- 4: Fully respected by public authorities. There are no restrictions on academic freedom or cultural expression.

Scale: Ordinal, converted to interval by the measurement model.

Question 12.3: Does the government attempt to repress civil society organizations (CSOs)?

### Responses:

0: Severely. The government violently and actively pursues all real and even some imagined members of CSOs. They seek not only to deter the activity of such groups but to effectively liquidate them. Examples include Stalinist Russia,

Nazi Germany, and Maoist China.

- 1: Substantially. In addition to the kinds of harassment outlined in responses 2 and 3 below, the government also arrests, tries, and imprisons leaders of and participants in oppositional CSOs who have acted lawfully. Other sanctions include disruption of public gatherings and violent sanctions of activists (beatings, threats to families, destruction of valuable property). Examples include Mugabe's Zimbabwe, Poland under Martial Law, Serbia under Milosevic.
- 2: Moderately. In addition to material sanctions outlined in response 3 below, the government also engages in minor legal harassment (detentions, short-term incarceration) to dissuade CSOs from acting or expressing themselves. The government may also restrict the scope of their actions through measures that restrict association of civil society organizations with each other or political parties, bar civil society organizations from taking certain actions, or block international contacts. Examples include post-Martial Law Poland, Brazil in the early 1980s, the late Franco period in Spain.
- 3: Weakly. The government uses material sanctions (fines, firings, denial of social services) to deter oppositional CSOs from acting or expressing themselves.

They may also use burdensome registration or incorporation procedures to slow the formation of new civil society organizations and sidetrack them from engagement. The government may also organize Government Organized Movements or NGOs (GONGOs) to crowd out independent organizations. One example would be Singapore in the post-Yew phase or Putin's Russia.

4: No. Civil society organizations are free to organize, associate, strike, express themselves, and to criticize the government without fear of government sanctions or harassment.

Scale: Ordinal, converted to interval by the measurement model.

The methodology of "Freedom on the Net" includes 21 macroquestions and about 100 items, in three categories: 1) Obstacles to access: infrastructure barriers and economic barriers to access, legal control and ownership of service Internet providers and independence of regulatory bodies; 2) Limits of content: legal regulations on content, technical filtering and blocking of websites, self-censorship, vitality and diversity of online media and the use of digital tools for civic mobilization; and 3) Violations of user rights: government surveillance, privacy, impact on expression and online activities, imprisonment, extralegal harassment or cyber-attacks. Based on the score in the set of items,

Freedom House assigns the following internet freedom ratings: Scores 0-30 = Free; Scores 31-60 = Partially Free; Scores 61-100 = Not free. In this study, we used the categorization and score assigned to each country in the 2016 Freedom on the Net report.

### 5. Chile

The Chilean case represents a model of democratic transition and successful economic reform in both its dynamics and its results<sup>4</sup>. A democracy in progressive consolidation for a quarter of a century, articulated around two political-partisan blocs (from the center-left nucleated in opposition to the dictatorship versus the inherited rights of the neoliberal project) with appreciable levels of governability and with rates of unprecedented growth for the region. These are some of the antecedents that are indicated to characterize this country as a particular case within the political instability and economic stagnation that has characterized the drift of the Latin American nations. Chile, thus appears as a consolidated democracy capable of achieving lasting governance in a highly volatile and complex sociopolitical context such as the context of democratic transitions. However, this consolidation entailed a progressive technocratization of political discourse and its logics of action, challenged by recent social mobilizations for the right of free education, improvements in various public services and changes in the constitution inherited from the dictatorship (Garretón, 2012, Hunneus, 2014, Durán, 2016). The V-Dem polyarchy additive index obtained by Chile is 0.95.

Chile has a population of 18 million inhabitants and an internet penetration of 77% of the population (Internet World Stats, 2017). According to data provided by V-Dem, Chile obtained a score of 5.56 in internet censorship in 2016, implying that the Chilean government allows unrestricted Internet access. The southern part of the country has remained at the highest level of respect for freedom of expression on the internet throughout the period 2006-2016. In contrast, it obtained a score of 2.42 in media censorship in 2016, implying that there are attempts at direct censorship but limited to especially sensitive issues. In this period 2015-2016, Chile receded in respect of the years 2013 and

<sup>4</sup> We thank the contributions of Carlos Durán Migliardi for the approach of the Chilean case.

2014, when V-Dem data reported that the government rarely attempted to censor the mainstream media in any way, and when such exceptional attempts were discovered, responsible officials were punished. With respect to harassment of journalists, Chile has a score of 3.34 in 2016, implying that it is rare for a journalist to be harassed for offending powerful actors and, if this happens, those responsible for harassment are identified and punished; the austral country has remained in this interval throughout the study period.

Finally, in 2016, Chile scores a 4.64 score in repression against CSOs, implying that civil society organizations are free to organize, associate, strike, express and criticize the government without fear of sanctions or government harassment; the country has remained in this interval throughout the study period. In the years 2015 and 2016, V-Dem did not measure academic freedom and freedom of expression in Chile; in 2013 and 2014, this country had been in the maximum range, i.e. the data reported that there were no cases of restrictions on academic freedom or cultural expression (see Figure 1).

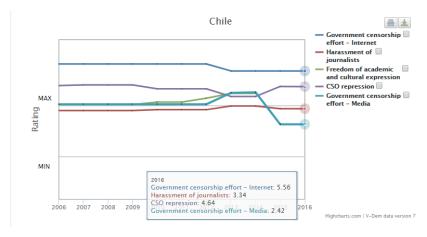


Figure 1. Indicators V-Dem Chile (2016)

Source: V-Dem data version 7

### 6. Mexico

In Mexico, the political regime emanating from alternation after 2000 can be formally classified as a polyarchy, although with deficits in cen-

tral dimensions such as the electoral sphere and the quality of party life. Frequently, its dominant actors (in particular the parties) operate in oligarchic ways, limiting the active participation of its members, capturing the national political agenda - restricting citizen demands and participation - and undifferentiated its political programs. We see, at the federal level, a limited pluralism and a low quality democracy. At the state level, we see subnational political regimes ranging from delegative democracy - with powerful governors imposing the pattern of regional political life - and punctual expressions of electoral authoritarianism, with their share of repression and use of violence. In a part of the regional and local governments, the political alternation and the civil ways of exercising the power resent, there is control of the press and the public employees (Marti, Ortega, Somuano & Wright, 2014; Loza & Méndez, 2016, Somuano & Nieto, 2016). The V-Dem polyarchy additive index obtained by Mexico is 0.85.

Mexico has a population of 127 million inhabitants and an internet penetration of 57% of the population (Freedom House, 2016). In the data provided by V-Dem, Mexico obtains a score of 4.28 in Internet censorship in 2016, implying that the government allows unrestricted access. In addition, the country has maintained the highest level of respect for freedom of access to the network throughout the period 2006-2016. On the other hand, it achieves a score of 2.44 in media censorship in 2016, which implies that there are direct censorship attempts, but limited to especially sensitive issues. Mexico has been in this range since 2011, advancing from the early years of the century when V-Dem data reported that attempts at censorship were routine, albeit indirect. With respect to harassment of journalists, Mexico scores a 1.65 score in 2016, implying that journalists are severely harassed and sometimes suffer major attacks - which can lead to murder, being the country with the most murders of journalists in the region - until they are forced to stop publishing on matters that may disturb the powerful. Mexico has remained in this interval throughout the study period.

In relation to academic freedom and freedom of expression, Mexico scores 2.85, implying that academics and intellectuals routinely exercise their rights and freedoms, but strong criticism of the government may sometimes lead to forms of repression; the country has remained in this range since 2013, previously meeting in a higher

interval and data indicate that there were few limitations to academic freedom and cultural freedom of expression with infrequent government sanctions. Finally, in 2016, Mexico scores 3.56 in repression against CSOs, implying that the Mexican government uses administrative sanctions to dissuade CSOs from acting or expressing themselves and that there may be GONGOs occupying spaces of independent organizations; the country has remained in this interval throughout the study period (see Figure 2).

Mexico 量土 Government censorship effort - Internet Harassment of journalists Freedom of academic MΔX and cultural expression — CSO repression Government censorship Rating MIN Government censorship effort – Internet: 4.28 Harassment of journalists: 1.65 Freedom of academic and cultural expression: 2.85 CSO repression: 3.56 Government censorship effort – Media: 2.44

Figure 2. Indicators V-Dem Mexico (2016)

Source: V-Dem data version 7

The report on "Freedom on the Net 2016" reports that Mexico is a country where the Internet is partially free and the press is not free. Mexico receives a score of 38 points out of 100 and registers its worst indicators in the dimension of Violations of Users' Rights (see Chart 1). The main negative indicator is that at least three journalists who covered online sensitive stories were killed between 2015 and 2016. Internet users are also arrested for their publications or online expressions.

Despite pressure from civil society in 2016, Mexico's Supreme Court confirmed new data retention requirements and real-time geolocation provisions approved in 2014, but ruled that it is necessary for the authorities to obtain a court order to access user metadata. This extends the surveillance capabilities of the Mexican State and violates users' privacy and anonymity rights. With respect to technical attacks,

at least three news sites suffered cyber-attacks in June 2016, during state elections in Puebla, thus disrupting voters' access to information at a critical time.

Chart 1. Mexico Freedom on the Net (2016)

Status	Total score	Obstacles to access	Limits on content	Violations of user rights
Partly Free	38	8	10	20

### 7. Ecuador

Ecuador is a delegative democracy historically weighed down by weak state institutions and political instability<sup>5</sup>. However, in the last decade, important achievements in rights and institutionality were obtained from the current Constitution, which is among the most innovative in Latin America. In the last decade, with the strength that Alianza País takes as the governing party and the legislative majority that it gets, serious doubts arise about the independence of powers. Despite the existence of free, open and competitive elections, the design of the electoral system - the distribution of constituencies, the type of list and the formulas for allocating seats - favors the majority party. Likewise, the executive-legislative relationship favors the former under a hyperpresidentialist scheme, with all the attributions that the Constitution grants to the president - such as governing by decree and veto capacity; while the legislature does not have the capacity to dismiss state ministers, which joins a historically weak party system and a belligerent civil society but besieged by the ruling party. In addition, given the majority character of the governing party, often the choice of authorities for the remaining powers and functions of the state responds to the same dominant political circle (Mantilla & Mejía, 2012, Ortiz, 2013, Ulloa, 2017). The V-Dem polyarchy additive index obtained by Ecuador is 0.82.

Ecuador has a population of 16 million and an internet penetration of 49% of the population (Freedom House, 2016). In the data provided by V-Dem, Ecuador obtains a score of 3.77 in internet censorship in 2016, which implies that the government allows access to the

<sup>5</sup> We thank the contributions of Coralia Barahona for the approach of the Ecuadorian case

Internet, including some sites that are critical of the government, but blocks selected sites that deal especially politically sensitive issues. The country has remained in this interval in the years 2015 and 2016, after having been in the upper range in the years 2013 and 2014. With regard to censorship of media, Ecuador obtains in 2016 a score of 1.89 which implies that the attempts of censorship are routine, although indirect. The Andean country has been in this interval since 2009, falling from the early years of the century when the V-Dem data reported that censorship attempts were direct but limited to especially sensitive issues. Regarding the harassment of journalists, Ecuador obtained in 2016 a score of 2.32, which means that some information professionals who publish content that annoy powerful actors are forced to stop their publications, but others manage to continue to practice journalism freely in the long term. Ecuador has remained in this interval since 2013, whereas previously, during the 2009-2012 period, data V-Dem indicate that journalists in this country were severely harassed and sometimes suffered major attacks until they were forced to interrupt publications on issues that could bother the powerful.

With respect to academic freedom and freedom of expression, Ecuador scores 2.70, which implies that academics and intellectuals routinely exercise their rights and freedoms, but strong criticism of the government can lead to forms of repression on some occasions. The Andean country has remained in this interval since 2009, previously it was in a higher range and data indicate that there were few limitations to academic freedom and cultural freedom of expression with infrequent government sanctions. Finally in 2016, Ecuador scores 1.56 in repression against CSOs, implying that the Ecuadorian government stops, processes and imprisons leaders and activists in CSOs who have acted legally; the country has remained in this interval since 2013 (see figure 3).

The Freedom on the Net 2016 report reports that Ecuador is a country where the Internet is partially free, while the press is not free. Ecuador receives a score of 41 points out of 100 and registers its worst indicators in the dimension of Violations of Users' Rights (see Chart 2). The report gathers evidence that the Ecuadorian government conducts on-line surveillance activities that affect a wide range of individuals (politicians, journalists and activists). Demands for defamation and frequent verbal attacks are used to discourage Internet users from

expressing critical comments to the government online. In this sense, for example, two opposition political leaders were sentenced to 15 and 30 days in jail respectively for their comments in social media. Several digital media suffered cyber-attacks after publishing information on the links between Ecuador's intelligence agency and the surveillance company Hacking Team; other digital media were attacked after covering anti-government protests in June 2015. Notably, the use of copyright infringement notes has become a commonly used resource for forcing the removal of critical content from digital media and social media platforms to the government.

Ecuador Government censorship effort - Internet Harassment of iournalists Freedom of academic and cultural expression CSO repression Government censorship effort - Media **Rating** MIN Government censorship effort - Internet: 3.77 Harassment of journalists: 2.32 reedom of academic and cultural expression: 2.7 CSO repression: 1.56
Government censorship effort - Media: 1.89

Figure 3. Indicators V-Dem Ecuador 2016

Source: V-Dem data version 7

Chart 2. Ecuador Freedom on the Net 2016

Status	Total	Obstacles	Limits	Violations
	score	to access	on content	of user rights
Partly Free	41	8	12	21

### 8. Venezuela

In the Venezuelan case, the rise and subsequent consolidation of the chavism was accompanied by a gradual change of the political regime that tended to personalization and autocratization, with a clientilized state apparatus supported by abundant oil revenues. From its early phase of democratic democracy (1999-2005), Chavism had a markedly presidentialist character; President Chávez obtained enabling legislation on several occasions to decide on various areas of public policy with broad powers. The second installment in Chávez's term (2006-2013) corresponds to competitive authoritarianism. At this stage, variables that coincide with this model are expressed, such as abuse of state resources to finance electoral campaigns, progress towards a hegemonic party model, control of the media and civil society, criminalization of activists and opposition leaders. Finally, from 2014, under the presidency of Nicolás Maduro, authoritarianism has become more akin to the closed variant, putting the opposition on the cutting edge of illegalization and resorting to massive repression of citizen protests.

With the implementation of the so-called National Constituent Assembly, steps are taken towards a further autocratization of the regime, which begins to assume prototypical totalitarian features, in some respects similar to the Cuban regime (Corrales and Hidalgo, 2013, Gómez & Arenas, 2013, Chaguaceda & Puerta, 2015). The Venezuelan V-Dem additive index obtained by Venezuela is 0.61.

Venezuela has a population of 31 million inhabitants and an internet penetration of 62% of the population (Freedom House, 2016). In the data provided by V-Dem, Venezuela obtains a 3.22 score in internet censorship in 2016, implying that the government allows Internet access, including some sites that are critical of the government, but blocks selected sites that deal with issues especially politically sensitive. The country has remained in this interval since 2013, after having been in the upper range in previous years. With respect to censorship of media, Venezuela obtains in 2016 a score of 0.50, which implies that the censorship is direct and routine. The Caribbean country has been in this interval since 2013 and previously it was located in the immediately superior interval in which the censorship was routine but indirect. With respect to harassment of journalists, in 2016, Venezuela gets a score of 1.38, implying that journalists are severely harassed and sometimes suffer major attacks until they are forced to stop publishing on issues that may disturb the powerful; the country has remained in this interval throughout the decade of study.

With respect to academic freedom and freedom of expression, Venezuela scores 1.92, which implies that academics and intellectuals try to exercise their rights and freedoms, but criticism of the government generally leads to repression. The country has remained in this interval since 2015, while previously it was in a higher range and the data indicate that until 2014 more academics and intellectuals were able to express themselves freely without being exposed to government sanctions. Finally, in 2016, Venezuela scores 1.80 in repression against CSOs, implying that the Venezuelan government stops, processes and imprisons leaders and activists in CSOs who have acted legally. V-Dem data indicate that detention and imprisonment of activists working within the framework of the law have been common in Venezuela throughout the decade of study (see Figure 4).

Venezuela 量土 Government censorship effort - Internet Harassment of journalists MAX Freedom of academic and cultural expression CSO repression Government censorship effort - Media Rating MIN Government censorship effort - Internet: 3.22 Harassment of journalists: 1.38 Freedom of academic and cultural expression: 1.92 CSO repression: 1.8 2007 2008 2016 Government censorship effort - Media: 0.5 Highcharts.com | V-Dem data version 7

Figure 4. Indicators V-Dem Venezuela 2016

Source: V-Dem data version 7

The Freedom on the Net 2016 report reports that Venezuela is a country where the Internet is partially free, while the press is not. Venezuela receives a score of 60 points out of 100 and registers negative indicators in the three dimensions Violations to the Rights of Users, Obstacles to Access and Limitations of Contents (see chart 3). The report gathers evidence that Venezuelan security forces routinely and arbitrarily arrest digital journalists, confiscate cell phones, and force users to erase protest images or queues to buy food.

In September 2015, opposition politician Leopoldo López was sentenced to nearly 14 years in prison after prosecutors alleged that he incited violence; as the main evidence in the trial against him, prosecutors presented hundreds of tweets and a video of YouTube in which the leader said the phrase "we have to go out to conquer democracy" and the key witness of the prosecution was a linguist who analyzed @leopoldolopez's speech to conclude that Twitter account was used to summon subliminally anti-government demonstrations.

The interception of emails from journalists and opposition activists continues to be a tactic widely used by the Venezuelan government, which has been establishing mass and automated surveillance mechanisms on the Internet since 2010. Since June 2014, the National Commission of Telecommunications (CONATEL) established as a routine practice the blocking of web pages that publish currency exchange rates; these and other websites continued to be blocked in 2015 and 2016.

The average speed of broadband does not exceed 2 Mbps, less than 5% of connections are faster than 4 Mbps. According to official figures, Internet penetration remained above 60 percent, although the total number of subscribers has and there is a significant gap between rural and urban areas. Currency controls adversely affect the telecommunications industry, while electricity rationing prevents users from accessing the internet connection.

Status	Total	Obstacles	Limits	Violations
	score	to access	on content	of user rights
Partly Free	60	18	17	25

Chart 3. Venezuela Freedom on the Net 2016

### 9. Cuba

Cuba is an autocracy, in that it is a regime where power is concentrated and/or personalized, it is exercised vertically and with varying degrees of arbitrariness and the inhabitants of the nation maintain with the State a relationship of subordination that prevents the exercise of citizenship rights. Belonging to the millenarian and extensive family of autocracies,

Cuba is not a traditional dictatorship or a military authoritarianism. Nor is it a mature post-totalitarianism. Their regime is still at an early stage (and difficult, and prone to relapsing) of post-totalitarian evolution (Farber, 2011; Rojas, 2015; Chaguaceda and Geoffray, 2015): an initial post-totalitarianism in which several totalitarian nuclei, political and police control, state ideology) are still central to the constitution, reproduction, and day-to-day functioning of the political order, but from a charismatic leadership to a collegial and bureaucratic one (Pasquino, 2014; Linz, 2000; Linz y Stephan, 1997).. The V-Dem polyarchy additive index obtained by Cuba is 0.38.

Cuba has a population of 11 million inhabitants and an internet penetration of 5% of the population (Freedom House, 2016). In the data provided by V-Dem, Cuba obtained a score of 1.32 in Internet censorship in 2016, implying that the use of the internet is routinely and systematically censored, although generally it is with indirect mechanisms. The island has remained in this interval since 2013, when Internet access for Cuban citizens began to open. With regard to censorship of media, in 2016 Cuba obtained a score of -0.48, implying that censorship of the media is total and systematic and has been so throughout the study period. With respect to harassment of journalists, Cuba has a score of 1.27 in 2016, which implies that journalists are severely harassed and sometimes suffer major attacks to force them not to publish on issues that may disturb the powerful; painfully, this is a slight improvement on the Caribbean island where until 2015 journalists did not even dare to try to report on issues that could disturb the powerful.

In relation to academic freedom and freedom of expression, Cuba scores 0.18, as academic activities and cultural expressions are severely restricted or controlled by the government, and this has been the case throughout the study period. Finally, in 2016, Cuba scores 0.98 in repression against CSOs, implying that the communist government persecutes in a violent and active way all the real members and even some assumptions of the CSOs and not only tries to dissuade the activity of these groups, but to effectively liquidates them. Paradoxically, the indicators of persecution of Cuban civil society have worsened since 2014 (see figure 5).

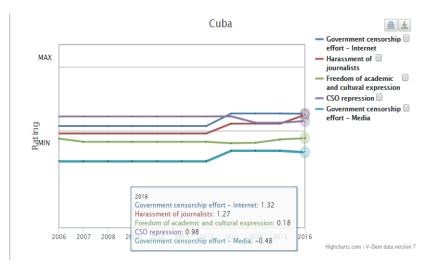


Figure 5. Indicators V-Dem Cuba 2016

Source: V-Dem data version 7

The Freedom on the Net 2016 reports that Cuba is a country where the Internet is not free and the press is not free either. Cuba receives a score of 79 points out of 100 and registers negative indicators in the three dimensions: Violations of User Rights, Obstacles to Access and Limitations of Contents (see chart 4).

Chart 4. Cuba Freedom on the Net 2016

Status	Total score	Obstacles to access	Limits on content	Violations of user rights
No Free	79	21	26	32

Since the United States and Cuba officially reestablished diplomatic relations, new regulations have reduced restrictions on US telecommunications companies to begin offering services on the island. The Cuban government launched its first public Wi-Fi hotspots in June and July 2015. While these hotspots have become a popular way to access the Internet, limited and costly connections remain a major barrier. Independent bloggers and journalists continue to face censorship, intimidation and arrests. During this period several removals of con-

tent were reported in the blog platform sponsored by the government: *Reflejos*. Despite the harsh censorship of content considered as "counter-revolutionary", Cubans have launched a series of independent websites, which offer alternative information on the Cuban reality.

### 10. Discussion and results

In this paper we try to demonstrate that internet control varies in association with existing political regimes. The V-Dem data allow us to make a comparison of the internet freedom score obtained by each of the countries and correlate it with their polyarchy index (see figure 6). The order obtained by the five countries in the variable "Internet Freedom" and in the "Polyarchy Index" coincides. The Pearson correlation analysis shows that the value of R is 0.9692, with the value p = 0.017788. The result is significant at p <0.05. This is a strong positive correlation, which means that the higher the "Polyarchy Index" the higher the score in the "Internet Freedom" variable. This provides statistical evidence to support the hypothesis that higher quality of democracy, greater freedom of the internet and greater autocracy, greater censorship of the internet.

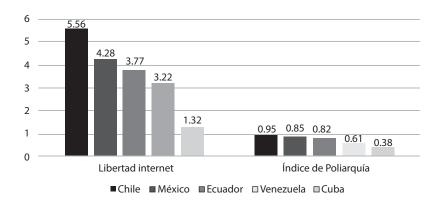


Figure 6. Internet Freedom / Polyarchy Index by country

In summary, this exploratory study presents evidences that allows to associate political regime and index of polyarchy with internet freedom. Chile, a high-quality democracy obtained a high Polyarchy Index (0.95) and a high score in the Internet Freedom variable (5.56), with no controls on the circulation of on-line information. Mexico, a low-quality democracy obtains a high Polyarchy Index (0.85) and a moderately high Internet Freedom (4.28) score, with second-generation selective controls on the flow of information on-line. Ecuador, a delegative democracy, obtained a high Polyarchy Index (0.82) and a median score in the variable Freedom of the Internet (3.77), with selective second-generation controls to the circulation of on-line information. Venezuela, a newly established hegemonic authoritarianism obtains a median polyarchy index (0.61) and a median score in the variable Freedom of the Internet (3.22), with selective controls of first and second generation to the circulation of on-line information. Cuba, an early post-totalitarianism obtained a low Polyarchy Index (0.38) and a low score in the Internet Freedom variable (1.32), with systematic first-generation controls to the circulation of on-line information.

While autocratic regimes, such as Cuba, prevent the widespread use of the Internet for fear of breaking the state monopoly on information (Puddington, 2017), hybrid regimes and low quality democracies, such as Ecuador and Mexico, tolerate a moderate rate of Internet penetration due to its importance for participating in the global economy and because it helps them to sustain their international legitimacy. Under competitive authoritarianism and other forms of neo-authoritarianism, as digital media consolidates as a real alternative to traditional news sources and social media platforms, they have become crucial tools for the political mobilization of citizens, it is begun to interfere in the access and use of the internet initially with second generation control mechanisms and later with first generation controls (Deibert & Rohozinski, 2010; Crete-Nishihata, Deibert & Senft, 2013; Puyosa, 2015; Puddington, 2017; Puyosa, 2017c), as happened in the case of Venezuela, as of 2009 and with more intensity after 2014. Finally, under democratic regimes advances are made in policies for the protection of users' rights, the conditions of access and discussion on net neutrality, as in Chile.

### 11. Conclusions

Since the end of the first decade of the 21st century, coinciding with the global expansion of the Internet and in relation to its political impact, actions and policies aimed at Internet control have spread internation-

ally. In a more concise and (generally) regulated within legal norms, democratic regimes have advanced in monitoring the flow of information and online communications to prevent phenomena such as terrorism or extremism in its various manifestations. Under the coordinates of hybrid or overtly autocratic regimes, the rulers have expanded not only their surveillance, censorship and sanctions on the internet, trying to monitor and narrow the dissent regarding their policies, but also have begun to use the network as a vehicle for promoting official agendas.

We consider, through the analysis of the revised evidence - both the general information of the cases and their disaggregated performance in the studies and indicators of Varieties of Democracy and Freedom on the Net - that there is a relation between the type of control policies of applied and nature (more closed or open, more autocratic or democratic) of the type of political regime prevailing in each country. In that sense, the more autocratic the regime is, the more first-generation internet controls are observed, which censor content and block access to the internet. Hybrid regimes, on the other hand, favor second-generation controls, which entail obstacles to access without totally blocking the service and sometimes criminalizing users and providers.

From the results of this exploratory study it is possible to propose a study that covers all the countries of Latin America and to analyze statistically the correlation between the index of polyarchy and the variables of freedom of expression, as well as the relations between qualitative categorization of the political regime with the adoption of control measures of the first or second generation information.

### 12. References

- Chaguaceda, A. & Geoffray, M. L. (2015). Cuba: dimensiones y transformaciones político-institucionales de un modelo en transición. En Bobes, V. C (edit), Cuba, ¿ajuste o transición? Impacto de la reforma en el contexto del restablecimiento de las relaciones con los Estados Unidos, pp. 47-86, México DF: FLACSO.
- Chaguaceda, A. & Puerta, M. I. (2015). Quo vadis Venezuela: de la democracia delegativa al autoritarismo del siglo XXI. Revista Mexicana de Análisis y Administración Pública, 4(1), 175-202.
- Coppedge, M., Gerring, J., Lindberg, S., Skaaning, S-E., Teorell, J., Altman, D., Andersson, F., Bernhard, M., Fish, M.S., Glynn, A., Hicken, A., Knutsen, C., Marquardt, K., McMann, K., Mechkova, V., Paxton, P., Pemstein, D., Saxer, L., Seim, B., Sigman, R. & Staton, J. (2017). V-Dem Codebook & Dataset v7.1 Varieties of Democracy. (V-Dem) Project., University of Gothenburg, and

- Helen Kellogg Institute for International Studies, University of Notre Dame. Available in https://www.v-dem.net/en/data/data-version-7-1/
- Corrales, J. & Hidalgo, M. (2013). El régimen híbrido de Hugo Chávez en transición (2009-2013). Revista Desafíos, 25(1), 45-84,
- Crete-Nishihata, M., Deibert, R., & Senft, A. (2013). Not by technical means alone: the multidisciplinary challenge of studying information controls. *Internet Computing*. IEEE, 17(3), 34-41.
- Dahl, R. (1989). La poliarquía. Madrid: Tecnos.
- Durán, C. (2016). Chile vuelve al vecindario: De la complacencia al malestar. En Caldera, A. & Chaguaceda, A. (coords.) Democracia en América Latina. Entre el ideal utópico y las realidades politicas, pp. 187-209, México DF: Editorial Fontamara/Universidad de Guanajuato.
- Deibert, R., & Rohozinski, R. (2010). Liberation vs. control: The future of cyberspace. *Journal of Democracy*, 21(4), 43-57.
- Drezner, D. W. (2010). Weighing the scales: The Internet's effect on state-society relations. *The Brown Journal of World Affairs*, 16(2), 31-44.
- Farber, S (2011) Cuba Since the Revolution of 1959: A Critical Assessment, Chicago: Haymarket Books.
- Freedom House (2016). Freedom on the Net. Silencing the Messenger: Communication Apps Under Pressure. Available in https://freedomhouse.org/report/freedomnet/freedom-net/freedom-net-2016
- Garretón, M. A. (2012). Neoliberalismo corregido y progresismo limitado. Los gobiernos de la concertación en Chile, 1990-2010. Santiago: Clacso-ARCIS
- Gómez, L. & Arenas, N. (2013). El populismo chavista: autoritarismo electoral para amigos y enemigos. Cuadernos del Cendes, 30(82), 17-34.
- Hunneus, C. (2014). La democracia semisoberana. Chile después de Pinochet. Santiago:
- Internet World Stats (2017). Usage and population statistics. Available in http://www.internetworldstats.com/south.htm
- Kerr, J. (2014). The Digital Dictator's Dilemma: Internet Regulation and Political Control in Non-Democratic States. Palo Alto: The Center for International Security and Cooperation - Stanford University.
- Levitsky, S. & Way, L. (2010). Competitive authoritarianism: Hybrid regimes after the Cold War. New York: Cambridge University Press.
- Linz, J. (2000). Totalitarian and authoritarian regimes, Boulder: Lynne Rienne.
- Linz, J. & Stephan, A. (1997). Problems of Democratic transition and consolidation: Southern Europe, South America and Post-communist Europe, Baltimore: The Johns Hopkins University Press.
- Loza, N. & Méndez, I. (2016). Poderes y democracias. La política subnacional en México, México DF: FLACSO México/Instituto Electoral del Distrito Federal
- Mantilla, S. & Mejía, S. (2012). Rafael Correa. Balance de la Revolución Ciudadana, Quito: Editorial Planeta del Ecuador.

- Marti, S., Ortega, Y., Somuano, M. F., & Wright, C. (2014). Democracy in Mexico. Attitudes and perceptions of citizens at national and local level, London: Institute of Latin American Studies.
- Marwick, A., & Lewis, R. (2017). Media manipulation and disinformation online. New York: Data & Society Research Institute.
- Ortiz, A. (2013). La sociedad civil ecuatoriana en el laberinto de la Revolución Ciudadana. Quito: FLACSO Ecuador.
- Pasquino, G. (2014). Nuevo curso de ciencia política, México DF: Fondo de Cultura Económica.
- Pearce, K. E., & Kendzior, S. (2012). Networked authoritarianism and social media in Azerbaijan. *Journal of Communication*, 62(2), 283-298.
- Pérez-Liñan, A. (2017). ¿Podrá la democracia sobrevivir al siglo XXI? Buenos Aires: Nueva Sociedad.
- Puddington, A. (2017). Breaking Down Democracy: Goals, Strategies, and Methods of Modern Authoritarians. Freedom House.
- Puyosa, I. (2015). Control político de internet en el contexto de un régimen híbrido Venezuela 2007-2015. Revista Teknokultura, 12(3), 501-526.
- Puyosa, I. (2017a). Cómo llegar al sumak kawsay en una campaña permanente. En Ponce, M., & O. Rincón. Medios de lucha. La comunicación de los presidentes en América Latina. Madrid: Ediciones B / Penguin Random House Grupo Editorial.
- Puyosa, I. (2017b). Bots políticos en Twitter en la campaña presidencial #Ecuador2017. Revista Contratexto, 27. Lima: Universidad de Lima.
- Puyosa, I. (En imprenta, 2017c). Control político de la información en los autoritarismos del s. XXI. En Kozak, Gisela (ed.). *El laberinto de la sinrazón*. Madrid: Alfa Editorial.
- Rojas, R. (2015). Historia mínima de la Revolución cubana, México DF: El Colegio de México.
- Somuano, M. F. & Nieto, F. (2016). Ciudadanía en México ¿Ciudadanía activa?, México DF: INE/ Colmex.
- Tilly, C. (2010). Democracia. Madrid: Akal.
- Ulloa, C. (2017). El populismo en escena ¿Por qué emerge en unos países y en otros no? Quito: FLACSO Ecuador



www.retos.ups.edu.ed

### The Telecommunications Reform in Mexico 2014. An analytical approach

#### La Reforma de Telecomunicaciones en México 2014. Una aproximación analítica<sup>1</sup>

Dr. Carlos Manuel Rodríquez Arechavaleta is a professor/researcher at the Department of Communication, Universidad Iberoamericana (México) (carlos.rodriquez@ibero.mx) (http://orcid.org/0000-0002-1188-2403)

#### Abstract

The work I present addresses the Telecommunications Reform in Mexico, approved and published in 2014. From locate in the Latin American scenario reforms in two distinct blocks from a reordering of economic integration and regional policy in 2014, it is proposed a theoretical framework to systematically to the various variables involved in shaping coalitions winning commercial policy aimed at trade liberalization or protectionist approach. The Mexican case can be explained by linking economic policies with state institutions, society and the international system as a dynamic interaction, constant reconfiguration from three analytical variables: i) the international context, ii) the ability to influence (leverage), preferences and strategies of employers, iii) State vulnerabilities, interests and initiatives. This logic-inferential derivation proposes a set of explanatory hypotheses for reform Telecomunciaciones in Mexico, and draws attention to the importance of integrative to the recent literature of democratic quality in Latin America approach.

#### Resumen

La presente investigación aborda la Reforma de Telecomunicaciones en México, aprobada y publicada en 2014. Partiendo de ubicar en el escenario latinoamericano las reformas en dos bloques diferenciados a partir de un reordenamiento de la integración económica y política regional en el 2014, se propone un marco teórico que permita una aproximación sistemática a las diversas variables que intervienen en la configuración de las coaliciones de política comercial ganadoras orientadas a la liberalización comercial o proteccionista. El caso mexicano se puede explicar vinculando las políticas económicas con las instituciones del Estado, la sociedad y el sistema internacional en una interacción dinámica, de constante reconfiguración a partir de tres variables analíticas: i) el contexto internacional; ii) la capacidad de influencia (leverage), las preferencias y las estrategias de los empresarios y; iii) las vulnerabilidades del Estado, intereses e iniciativas. Esta derivación lógica-inferencial propone un juego de hipótesis explicativas para la reforma de Telecomunciaciones en México y llama la atención sobre la importancia de su enfoque integrativo para la literatura reciente de calidad democrática en América Latina.

#### Keywords | Palabras clave

Telecommunications reform, distributional coalitions, legislative coalitions, international context, business sector state

Reforma de Telecomunicaciones, coaliciones distributivas, coaliciones legislativas, contexto internacional, sector empresarial, estado.

El trabajo constituye un resumen de un proyecto de investigación en curso, presentado por el autor a la Dirección de Investigación de la Universidad Iberoamericana para su evaluación por una comisión externa de dictaminadores, optando por financiamiento institucional. Avances discretos fueron presentados recientemente en un congreso de ALICE. Es importante enfatizar que no presenta resultados concluyentes; su exposición pretende perfeccionar el marco teórico-interpretativo en construcción, así como precisar la lógica inferencial del argumento. En palabras de Verba, Kim & Keohane (2000), "mejorar teorías y evidencias" es su único fin en estos momentos.

#### 1. The Latin American context

In July 2012, the former Mexican hegemonic party Institutional Revolutionary (PRI) won the presidency. Lesson learned, his "young" candidate emphasizes in his campaign the need to "move" reform-the political-economic dynamics of the country, and thus ensure a renewal in the international image of Mexico. To reverse six years of violent confrontation to the drug traffic, characteristic typical of the previous presidency; to break the legislative immobility and to displace old corporate structures that inhibit the development and the international leadership of the country. In short, a new national modernization strategy will be at the center of its campaign and governance.

Among the proposed reform package is a long-standing debt: reforming telecommunications in a historical scenario of high concentration of media and information technology, with the duopoly Televisa and TV Azteca -85% of the open and cable television audience- for one side and the other TELMEX, owned by the magnate Carlos Slim, controlling fixed telephony, cellular and international connections. Faced with these corporate entities with sophisticated legislative lobbying and close ties with political actors, negotiating a reform implies a consensus on corporate commercial interest with the new dynamic emanating from the «Pact for Mexico» and the legislative majority of the ruling party (PRI).

But the crux of the question arises: Will the new political scenario guarantee a reform that modifies the foundations of a market with monopolistic media and technological actors, limited competition and high cost offer? Can the predominant design of commercial television (private duopoly) be modified? Will the number of private and public television channels increase? Will the public-non-state television model be strengthened with government autonomy? What will happen to the community media? On the other hand, will the functions of the Federal Telecommunications Commission (COFETEL) - regulatory body - be reformed? What degree of participation will civil society have in this reform?

Based on these questions the present research proposes: a) to reconstruct the antecedents; b) analyze the institutional context; c) outlining the strategies of political actors (A1), media and technology (A2) and civil society (A3). Finally, the previous analytical route will allow us to interpret -contextualizing- the proposal of reform delivered

by the President to the Legislative, its discussion, and finally, the scope, contradictory elements and public reactions to the approved Law, as well as its uniqueness within the reformist context. As a corollary it is also intended to d) evaluate in the light of the theoretical literature the quality of democracy in the contributions of the Telecommunications

reform in Mexico.

It is important to place the aforementioned reform in the current Latin American context, characterized by an intense debate on the State-media-civil society relationship, specifically in countries where leftist neo-populist governments have taken actions to deal with the intense double stress tension with the great media conglomerates: a) the great media actors have assumed the function of political opposition to the government and b) the concentrated ownership structure of the media actors (Mastrini and Becerra, 2009) limits the expression and circulation of the diversity of alternative discourses. In Santander's words, "despite electoral triumphs, hegemonic media discourses remain those of the opposition<sup>2</sup>" (2014, p.17). For his part, Kitzberger acknowledges that in addition to challenging the press by placing it in a populist way, in the place of the «anti-people» or the «establishment», the governments of the region have appealed to forms of direct communication that dispute journalism's claim to exclusive mediator between the State and civil society (2009, p.168).

In an attempt to synthesize the state-media and telecommunications reform scenario in Latin America, we could place the reforms in two distinct blocks from a rearrangement of regional economic and political

An interesting explanation could be that the electoral defeats of the old traditional parties and the triumph of the progressive governments made the traditional political system very unstable, provoking centrifugal dynamics, a reconfiguration of the map, the withdrawal of the old party organizations and the consolidation of new, that is to say, the birth of «a new block of power in South America». In this context, the media system in South America has provided refuge and rearguard to the right-wing actors, since the political changes of the last decade, although they allowed to displace the oligarchies of the Executive Power, have hardly changed the state-middle relations built in the 1980s and 1990s (Santander, 2014). In this same direction, Sader assumes that the main South American media began to exercise in the last decade "the political and ideological direction of the Latin American right", and they become the place from which "the organic intellectuals of the oligarchy" act ( 2009, cit. In Santander, 2014, p.22).

integration: the first bloc included progressive governments (moderate reforms) and radical governments (radical reforms) that were integrated into organizations such as Mercosur, ALBA and CELAC with an alternative left orientation to the neoliberal capitalism of the Washington Consensus. The bloc was made up of countries such as Brazil, Argentina, Uruguay (Moderate Reformists) and Venezuela, Ecuador and Bolivia (Radical reformers). Both were characterized by a political confrontation of variable intensity between the State and the media system, with their respective ideological polarization (Kitzberger, 2010).

The second bloc is characterized by neo-liberal governments conditioned by integration into the Pacific Alliance and the North American Free Trade Agreements (NAFTA), including Mexico, Peru, Colombia and Chile, where reforms are underway, aimed at improving regulatory<sup>3</sup> frameworks and their objectives were: (i) to promote open markets for competition to promote efficient delivery of services (adequate quality, modern services and efficient prices); (ii) to prevent abuses of market power (excessive pricing and anticompetitive behavior) by dominant firms where competitive markets do not exist or fail; (iii) create investment-friendly environments to expand telecommunication networks; (iv) promoting confidence in the markets through transparent regulatory and licensing procedures; (v) promote greater connectivity through effective interconnection agreements; (vi) optimize the use of scarce resources, such as radio spectrum, numbering and rights. It is important to recognize that the effectiveness of the regula-

<sup>3</sup> Regulation is generally applied to markets whose structure makes it unlikely that competition will operate effectively. In the past, in these markets, with high fixed costs and a natural monopoly tendency, the regulator's role was to bring the industry's performance closer to the results it would have if it operated under competitive conditions. To the extent that technological advances have allowed the successful entry of more than one company into the telecommunications markets, the role of the regulator has changed. Currently, its objective is to generate an environment and conditions that promote effective competition, so that, the use of regulation is less and less necessary (Razo and Rojas Mejía, 2007).

tory body and its impact on quality of service depend on respect for its two central characteristics: independence<sup>4</sup> and technical capacity<sup>5</sup>.

Finally, in a highly concentrated market (Mastrini and Becerra, 2009, Huerta-Wong and Gómez, 2013), with a weak regulatory body (COFETEL) (Mariscal and Rivera, 2005), media and technological actors with cross-ownership, which guarantees them wide market dominance and high «expertise» in the political lobbying (Telebancada), and in turn, political actors with close ties with media corporations, in addition to limited organizational and mobilizing capacity of the concerned civil society, constitute the complex environment for the discussion and approval of the reform in Telecommunications in Mexico. It is worth asking if this reform will bring important changes to the dynamics of telecommunications in the country, increase the competitiveness of the sector, increase the information options and reduce the costs of services, and whether it will have more channels and options for expression and deliberation the Mexican civil society.

Although there are different models of organization of the regulator, the most accepted institutional structure has as its fundamental component its independence. An independent regulator is better placed to enforce regulations objectively and impartially. Such independence increases the likelihood that the regulator will protect competition and not competitors, which has positive effects on the development of the sector. In addition, the confidence of economic agents in the impartiality of regulatory decisions increases with the degree of independence of regulators. This confidence can stimulate the investment of incumbent operators and new competitors. The decisions of the regulator often tend to generate controversy among potential stakeholders and, therefore, attempts to exert pressure on them. Independence helps the regulator to act with neutrality and with autonomy with respect to political pressures or operators - risk of capture- (Razo and Rojas-Mejía, 2007, Mariscal and Rivera, 2005, Rozas-Balbontín, 2002).

Technical capacity is essential to identify the type and intensity of regulation that a sector should have, as market developments, technological developments and changes in operator structures and strategies should be continuously assessed. The determination of the degree of regulation required in the sector is a fundamental task of the regulator. Excessive regulation can be counterproductive and slow development. On the contrary, hasty liberalization (deregulation) can lead to anti-competitive practices, especially if there are operators with a dominant position or significant market power. (Razo and Rojas-Mejía, 2007; Mariscal and Rivera, 2005; Rozas-Balbontín, 2002).

Block II. Block I. (ALBA-Mercosur-CELAC) (TLCAN-Alianza Pacífico) **Progressive Governments** Radical Governments Neo-liberal Governments Neo-Lib. Reformers **Moderate Reformers** Radical Reformers (RR) (NLR) (MR) Brasil Venezuela México Argentina Ecuador Perú Uruguay Bolivia Colombia Chile Confrontation Political System-Media System Market-oriented technical regulation

Figure 1. Blocks of Reformist Governments in Telecommunications in Latin America 2014

Source: own elaboration

#### 2. Theoretical framework

There is a prolific literature on structural reforms and their political cost in Latin America (Schneider & Wolfson, 2005; Haggard & Kaufman, 1995; Smith, Acuña & Gamarra (eds), 1994). On the other hand, the rapid and radical economic openness developed in Mexico since the second half of the 1980s and its implementation in the 1990s has been the subject of interesting studies (Palma-Rangel, 2007; Thacker, 2000; Heredia, 2002).

The present project tries to explain the recent reform of Telecommunications in Mexico from a theoretical perspective that allows us to integrate the diverse interacting variables and the contextual factors that influence the approval of the Law referenced ut supra. In this respect, the theory developed by S. Thacker in Big Business, the State, and free trade. Constructing Coalitions in Mexico (2000), is useful and suggestive interpretatively, as well as an excellent antidote to the short-range-often ideologized-explanations that predominate in Mexican public discussion.

The author in question (op cit), starting from questions about the reason for the variation in the patterns of trade liberalization in developing countries, despite the similar international context of the 1980s, emphasizes that external factors can provide certain political opportunities and resources that will be mobilized, under certain conditions, to redesign the domestic political arena in which public policy reforms will take place. Thus, the approach integrates variables from the international context with an emphasis on the specific dynamics of each country within its political institutions (state, party system, executive-legislative ties, autonomy of levels of government, formal and informal rules for configuration and rotation of political elites, etc.) and ways of connecting with politically active social sectors. As a result of this dynamic, «trade policy coalitions» will emerge, in other words, competitive alliances linking public and private sector leaders with similar interests to promote or oppose certain trade policies (Thacker, 2000, pp. 20-ff.)<sup>6</sup>.

Under the premise that «winning» political coalitions define which policy will be successfully implemented and sustained, linking economic policies with state institutions, society and the international system in a dynamic interaction and constant reconfiguration, the author proposes an analytic framework where the intervening variable - both cause and effect - will be the "coalitions" (see Figure 2). Thus, the three analytical variables proposed are: i) the international context, ii) leverage, preferences and strategies of businessmen and iii) vulnerabilities of the state, interests, and initiatives.

Thacker evaluates the predominant approach in the studies of Mexican economic openness centered on the institutional distance of potential opponents of free trade (unions), formerly corporate allies of PRI presidentialism, of the decision of the commercial open, which reduces the costs of openness and viability, as well as the characteristics of PRI's corporate presidentialism. However, it considers that they are not variables that fully explain the reform of Mexican openness, so it focuses its attention on the process of incorporating potential winners in a context of free (international) trade within the apparatus of design and implementation of public policies (2000, pp. 17-20). Later studies recognize as their «great merit» the empirical analysis of the preferences of business man and identify the range of factors that influence the attitude to adopt in the face of market reforms. A set of these factors revolves around contextual elements that influence interest calculations; another set considers the characteristics of large firms or individual plants that affect business decisions (Schneider & Wolfson, 2005: 353).

#### 2.1. International Context

International actors such as the World Bank, the IMF and governments providing international credit impose strong "constraints" on policy options, from the conditional use of their credit practices, the implementation of their technical expertise and the imposition of economic sanctions. Such pressures can alter calculations of the relative benefits of different policies. Another important contextual factor is the economic crises that often precede the reforms and their impact on the perceptions and expectations of the economic agents (Schneider & Wolfson, 2005). The relative weight of international constraints and opportunities depend on the location of a country in the international system and the ability of its political actors to capture and channel international forces. Another important factor will be the international opportunities presented. The 1982 crisis made Mexico one of the two largest indebted developing countries; however, its geographical proximity and political ties with the US allows access to a program of debt restructuring or reduction and ample credit from international lending agencies (IMF, World Bank and the US government itself). Mexican geography and its long border with the United States allowed it access to large foreign markets (such as that of the northern country itself), providing an incentive for export-based development platforms, radically different from the model of development from the substitution of imports of the decade of the seventies.

#### 2.2. Business Sector

a. Leverage, understood as the ability of one actor to exert pressure on another, derives from the control of the private sector over investment resources. Therefore, policy makers should pay close attention to the interests of those who control mobile capital resources when

The authors acknowledge that the economic crisis makes businessmen more open to innovation in public policy because they perceive that the status quo is unsustainable. For other authors cited, the crisis reduces public rents obtained under the old regime, as well as incentives to defend the status quo, and generally weakens interest groups. Others argue that bad economic times make voters and politicians more willing to take risks and therefore to accept radical reforms that promise to be very profitable, even though they can also lead to large losses (Kingstone and Weyland, cited in Schneider & Wolfson, 2005, p.353).

- levels of international capital mobility face the country. These investors can become attractive coalition<sup>8</sup> partners.
- b. Interest/preferences refer to the relative attractiveness of different segments of the private sector as coalition partners and trade policy interests rooted in different groups in the private sector. For Thacker (2000) generally, the holders of the largest mobile resources are able to adjust better to the liberalization of trade. The size of the company generally makes liberalization easier because the cost of adjustment is often lower on large firms than on smaller firms. Differences in the type of capital resource also affect interest on commercial policy as liquid resource holders will be better placed to respond to the signals of the new market resulting from trade liberalization, as well as reallocate their capital resources from the losing sector to the winner in the new conditions. Therefore, businessmen with large mobile capital can enjoy competitive advantages under free trade and will be more favorable to becoming members of coalitions favorable to trade liberalization. Conversely, small fixed-capital firms will be less able to adjust to new market signals, being more likely to sympathize with protectionist coalitions.
- c. The intensity of trade policy preferences (sector, size, resource mobility) determines the incentives to participate in trade policy coalitions. The direction of these interests (toward protectionism or free trade) defines which coalition of trade policy will seek to participate. Schneider & Wolfson emphasize that if the fluid and changing context, as well as the multiple facets of business organization, is added, it becomes more difficult to discern what the businessmen's preferences for market reforms might be (2005, p. 355).

Summarizing the above, when the entrepreneur has a high score in the capacity of structural leverage and interest in free trade, it will be more favorable to be included in a coalition oriented to free trade. On the contrary, if it has a significant capacity for structural influence but

<sup>8</sup> According to the author, states often develop specific policy concessions aimed at increasing the adjustment of expectations about the risk on return of capital over other countries and internationally attracting mobile investment resources (Thacker 2000: 29).

its interest is oriented towards protectionism, it will be more oriented to join a protectionist coalition.

Actors with little capacity for structural influence but clear interest in trade policy could be members of the respective coalition, but they will not be particularly influential. The combinations presented help to explain both the changing identities and the relative strength of competitive coalitions on trade policies from the perspective of businessmen (Thacker, 2000, pp. 34-ff).

International context
- Constraints
- Opportunities

The State
- Vulnerabilities
- Interests
- Initiative

Coalitions
- Training
- Relative strenght

Trade policies

Businessman
- Capacity and influence (leverage)
- Preferences
- Strategies

Figure 2. Political Coalitions and Free Trade

Source: Thacker (2000, p. 34).

d. Strategies. The participation of different factions of the private sector in trade policy coalitions depends on a number of factors. Large segments of the private sector whose capacity for structural influence tends to be larger often have less problems of collective action by participating directly in trade policy coalitions. In contrast, small firms whose capacity for structural influence tends to be smaller fixed capital - are usually more dispersed and less likely to participate in coalitions.

Organizational and institutional variables also have influence, since small firms generally present greater logistics problems or high transaction costs in participating directly; while large firms frequently have the resources and time necessary for relations with the government and participate in coalitions. Small firms tend to have an indirect representation in the institutional channels - chambers

of commerce and associations -, so that sectors and firms with more effective institutional representation can counteract these effects, without achieving the active participation of the large firms.

#### 2.3. The State (policy makers) and their vulnerability

Refers to the social pressures that the State faces to hold its authority. Structural vulnerability is linked to the State's dependence on private sector investment to achieve economic growth and employment (structural influence of businessmen). In addition, the state may be vulnerable to electoral pressure and the dynamics of partisan competition. A complete explanation of state vulnerabilities combines structural and non-structural variables that condition the political processes in which coalitions are constructed. In the case of Mexico, the structural vulnerability of the Mexican State is an important reason for the formal incorporation of businessmen in the stabilization and reform processes in the late 1980s and early 1990s. The vulnerability of the state to structural pressures will then depend on how much it can face without the support of businessmen- or with des-investment - the economic challenges. When the state has access to alternative capital resources and can use them to promote employment and economic growth, it may pay less attention to the interests of private capital. For example, the oil boom and the growth of the Mexican economy in the 1970s made the state less vulnerable to private capital; the collapse of oil prices in the mid-1980s had the opposite effect.

Electoral challenges to political authority can inspire a shift in the coalition of economic policies and generate incentives for policy makers to design and implement policies to reflect the strength and identity of the new support bases. In Mexico, growing electoral pressures resulting from the electoral victories of the PAN in the 1980s and the creation of the Left National Democratic Front (FDN) and its election result in 1988 forced the PRI government to form an unofficial alliance with the leadership of the PAN, recognizing its electoral victories in exchange for support for the implementation of its reformist agenda of economic opening.

The characteristics of state institutions and their interests, as well as their policy maker leaders, guide the state's participation in trade policy coalitions. Factors such as the balance of power between state agencies, the identity and interests of the main implementers of public

policies, the degree of independence of the Executive in relation to the Legislative and Judicial power, as well as the effectiveness of the State's organizational control over social groups. Another important element is the corporate control of social groups, which can make it easier for public policy implementers to isolate politicians in favor of 'losing' public policies and to organize and include 'winning' policy support. In Mexico, strong presidentialism and the dominance of the executive over other powers allowed the state to isolate potential opponents of policies of economic openness in other sectors of government. In addition, the control of the PRI of the trade union movement and the participation of the Mexican Chamber of Commerce in the signing of the agreements added to the coalition of economic opening in the nineties.

In this sense, the typology of coalitions in the economic reform policy proposed by Schneider & Wolfson (2005, pp. 360-ff) is considered useful for the analysis of the Telecommunications reform in Mexico:

Chart 1. Types of coalitions in economic reform policy

	Electoral	Legislatives	Distributives	In defense of public policies
Types of members	Groups of voters	Political Parties	Companies and organized interest groups	Individuals from the public and private sectors
Primary activities	Political campaigns	Legislate and implement public policies	Lobbying	Networking and proposal analysis
Exchange base	Votes	Votes in the legislature	Economic resources	Personal ties and ideology
Interaction between members	Limited	Intense, formal and permanent	Variable, often informal	Intense, informal and permanent

Source: (Schneider & Wolson, 2005).

According to the authors (op. Cit.), the literature on economic reforms has focused on distributive and public policy coalitions, paying little attention to «legislative» and «electoral». A «legislative coalition» (or legislative-executive) consists of two or more parties represented in the legislature that consistently vote in favor of the president and the executive. Characteristics of the party system such as polarization and fragmentation constitute obstacles to reform, hence the advantages of

having majority governments. However, recent studies suggest that a greater number of effective parties may favor, in practice, the creation

of coalitions and thus allow greater public management<sup>9</sup>.

«Public policy coalitions» consist of more or less fluid sets of individuals who participate in government management in specific areas, a small amount that is decided individually and varies by policy, period and country. Almost all variants of these coalitions begin with officials in high economic positions (finance minister, president of the Central Bank) and usually include representatives of organized social groups, businessmen, consultants and independent academics, as well as representatives of international financial institutions.

The «electoral coalitions» are presented in two variants: constructed and spontaneous. In the first type, legislative parties and coalitions sometimes try to form electoral coalitions by supporting certain candidates together and urging their traditional voters to support them. In the second type, informal coalitions of voters converge more spontaneously in the course of an election campaign as groups approach certain parties or candidates. Compared to other coalitions, elections are heterogeneous, mobilized for a short period of time, and the contact between their constituencies is scarce, and their main protagonists are "political businessmen": candidates, partisan leaders, contributors to the campaign and companies linked to the media.

In this regard, it is suggestive to revise the approach proposed by Sosa Hernández from the approach of the "distributional theory of gradual change" that recognizes the constant change of institutions from a combination of three elements: ambiguity of rules, role of agency and power (2016, pp. 94). The agency or actor will be oriented to distribution and power as an effect of the institution, and if change drives power, ambiguity is allowed in the rule (its interpretation and

When a relatively small number (from four to eight) of relatively stable parties compete, and none of them can realistically embrace the ambition to be a majority, the only path to executive positions is coalitions (Brazil and Chile during the nineties). In other cases, (the evolution towards a system with three effective parties - Mexico - or another one of more parties but one of them is dominant (Argentina), certain political leaders can hope to reach the majority in the next elections, and with that expectation they may choose to remain outside the coalitions and thus allow minority governments simply to remain afloat (Schneider & Wolfson, 2005, pp. 364-ff).

execution). Actors will be «agents of change» with definite preferences and preferred strategies consisting of specific institutional contexts, so that the types of agents facing change may have varying positions to promote or resist it: (a) «the rebels», who seek to eliminate rules and do not respect them; b) «symbionts» (or symbiotic), that when change happens, their model to be followed is inertial, they follow the rules as long as they get benefits; c) «the subversives», who follow the rules while they find the opportune moment to change them and; d) «opportunists», who follow the rules without being clear if they want to change them.

#### 3. The Telecommunications Reform in Mexico

The Telecommunications Reform is part of a prioritized package of five fundamental reforms promoted by the Presidency of the Republic as axes of economic growth and democratic governance in the framework of a legislative cooperation agreement between the various political parties. In a context of high concentration of media ownership, with a history of close links between the state and media and technological actors, and the negative antecedents of previous reforms in the sector, the presidential reform initiative needed organizational and institutional conditions conducive to its approval. López Leyva (2015, p.81) points to the conjunction of certain facilitating factors for the implementation of the reforms in the first third of the government of Enrique Peña Nieto:

- a. A favorable previous context in terms of distension and understanding, in which the demands of the President's reformist agenda were added by social groups (e.g. the "yosoy132" Movement).
- b. The generation of an alternative negotiating space to the Congress of the Union that allowed giving effective exit to the agenda of the Executive in consonance with the specific agendas of the participating political parties, with a careful timing.
- c. A change in the strategies of political relations of the two opposition parties, in which the weight loss of its two strongest figures was significant (Felipe Calderón and Andrés Manuel López Obrador, respectively).

Indeed, the political context characterized by the absence of strong questions about the previous election and the legitimacy of the President-elect favored parallel negotiation as a conciliatory strategy on the agendas of the main political actors (the Executive and the main opposition parties). Thus in its official version the «Pacto por México» "Pact for Mexico" becomes "the most relevant political agreement that has been made in decades in Mexico". Its scope was even compared with the celebrated Moncloa Pacts, because "it is an agreement to carry out major actions and specific reforms that project Mexico towards a more prosperous<sup>10</sup> future." The signatory actors were:

(...) aware that a National Pact, formed with the coinciding points of the different political visions of a Mexico, is indispensable, committing the government and the main political forces willing to promote a set of initiatives and reforms, to carry out effective actions so that our country improve "(ibid).

As López-Leyva rightly acknowledges (2015, p. 77), its greatest virtue was to be an effective channel for negotiation, it became its antipode subject to many criticisms: it seemed to nullify the difference by privileging unanimity in legislative deliberation.

The alliance strategy that constituted the «Pacto por México» allowed a package of important structural reforms to be approved in just two years. The President's proposal for telecommunications reform, after a short period of discussion in Congress, was approved in both Chambers with broad support from legislators: in the Chamber of Deputies, it had the vote in favor of 92% of the legislators, while in the senators obtained 96% (Lopez-Leyva, 2015, Sosa-Hernandez, 2016, Sánchez-García, 2014).

With respect to media<sup>11</sup> actors, Sosa-Hernández (2016) details how their "reduced activism" to defend their positions reveals some

<sup>10</sup> Excerpted from www.pactopormexico.org

<sup>11</sup> Sosa-Hernández conceptualizes them as groups of media power (GPM): 1. Select group of media owners that have the domain of a concession of a public good, specifically, of the frequency bands that make up the radioelectric spectrum. 2. Being this the center of its business activities, it tends to the concentration of the market (monopoly) or, to close sharing a space of the same (duopoly). 3. It makes use of both proactive and reactive mechanisms of action; the latter when the situation warrants it and requires to defend interests that in the short term infer that

calculation about the costs and benefits expected of the reform without representing an issue of conflict with Congress<sup>12</sup>, acting as opportunist agents who did not fight the reform, "let it run", and adapt to its impact, without implying their full agreement<sup>13</sup>. This change in strategy can be explained by the profile of the incoming president, and more emphatically, by the presidential strategy itself designed to process the transformations it would undertake: reform was proposed and articulated in alliance between the Executive and the opposition parties (2016, p. 114).

The deliberative spaces where the interested civil society could counter the initiative of the political and media actors were limited. The House of Representatives gave priority to the media businessmen in their consultation. However, the Senators of the PRD received in 10 days representatives of various political sectors, specialists and academics, specifically the National Autonomous University of Mexico (UNAM). Subsequently, the four committees involved in the decision of the initiative agreed to receive experts, officials and concessionaires in public forums. Participants included the president of the CIRT, the president of the CCE, the director of TV UNAM, the advisers of COFETEL, all COFECO commissioners, researchers, academics, and even members of the # YoSoy132 Movement.

One of the most active groups of civil society was the Mexican Association of the Right to Information (AMEDI), which had delivered - according to its own version - a regulatory proposal in October 2013 to legislators from various parties, getting 18 senators to subscribe<sup>14</sup>.

they will be attacked. 4. They develop better in opacity, because under the cloak of invisibility they can exert their ability to influence and pressure with more effective results (2016, p. 96).

<sup>12</sup> For Sosa-Hernández, the attitude of the media power groups (GPM) was a cautious combination of strategies of public discussion with the use of mechanisms of institutional dialogue such as lobbying and participation in open consultations. The clearest activism came from the Business Coordinating Council under considerations that had to do with legal (in) certainty and the right to property (2016, 113).

<sup>13</sup> Regarding media power groups, the author finally defines them as ambiguous agents for change, because it is the valuation of conditions that allows them to lean towards one option or another (2016, p. 115)

<sup>14</sup> Cf. "Reform to telecommunications and broadcasting in Mexico: perspective of the Mexican Association of the Right to Information", TLA, Journal of Social Sciences, Faculty of Law and Social Sciences, BUAP: New Era, Year 9, No. 39, October 2015-March 2016, pp. 188-212.

In a forum organized in the Senate in the first days of April 2014, the association recognizes that it has expressed - in the voice of its president Agustín Ramírez Ramírez - its arguments against the negative aspects of the presidential initiative, since it "perverted the purpose of the constitutional reform, because it was very far from the purpose that gave rise to it, " that is, to satisfy the fundamental rights of freedom of expression, right to information and right of access to Information and Communication Technologies, as well as conditions for effective competition in broadcasting and telecommunications<sup>15</sup> services.

For AMEDI, the initiative sought a weak regulator, subordinated to the interests of the federal executive, by allowing the Ministry of Interior to keep watch over radio and television services and federal government bodies such as the Secretary of Communications and Transportation and the Commission Federal Regulatory Improvement Department of the Ministry of Economy interfere in the regulatory projects of the Federal Institute of Telecommunications. On the other hand, the initiative disfigured the principle of net neutrality, a basic condition for guaranteeing universal access to Information and Communication Technologies, and ignored the rights of audiences, the importance of public media and social use, "Gross omission" that limited the expression of ideological, ethnic and cultural diversities. It even excluded Higher Education Institutions from the means of public use "by stifling them with discretionary requirements", in addition to prohibitions to have sources of financing.

However, the most visible attempt to counter reform from civil society seems to have been the «Front for Democratic Communication», formed on April 11, 2014 by politicians from various parties, academics, experts, artists and intellectuals with a critical stance regarding the presidential initiative, which was reflected in a public document stamped with their signatures <sup>16</sup>, and even the threat of resorting to the Supreme

<sup>15</sup> AMEDI considered that it was an asymmetric regulation in the treatment that it granted to the regulated markets; while on the one hand it is fortunately very timely in the measures that can be imposed on telephony, it is very limited in the treatment that appears to be imposed on television. "Reform to telecommunications and broadcasting in Mexico:... "Ibidem, p. 208.

<sup>16</sup> The "Front for Democratic Communication" signed by public figures such as Cuauhtémoc Cárdenas, Javier Corral Jurado, Sergio Aguayo, Elisa Alanís, Alma

Court of Justice of the Nation to resolve the unconstitutionality of the presidential initiative. However, the civic counter-reform attempt could not stop the outcome: the approval by a large legislative majority of the presidential initiative "without major changes."

#### 4. A hypothetical-deductive model to explain the Reform

The Federal Law of Telecommunications and Broadcasting, published in the Official Gazette of the Federation on July 14, 2014, allows an interesting argumentative exercise by integrating variables of the political context with institutional, social organization and leadership factors.

V1. The «Pacto por México» as a strategy for prior political negotiation produced incentives for the construction of a broad legislative coalition to support the presidential initiative.

V2. The link between the President and the main political actors (A1) with monopolistic media and technological actors (Televisa / TELMEX) (A2) favors the combination of interests, expectations and strategies aimed at trade liberalization and free trade.

V3. The relevance in the international scenario of the mobile capital flows of these companies (Televisa, TV Azteca and TELMEX), which constitute conglomerates with resources, capital, technology and international influences. They have been successful businessmen in the international arena, even with important actions and properties in the United States, Europe and Latin America.

V4. High capacity of structural influence of these media and technological actors on the national economy, which exerts a pressure on the expectations of growth and economic stability of the government.

V3 + V4. It turns media businessmen (Televisa, TV Azteca and TELMEX) into attractive partners of «Trade Policy Coalitions» oriented to the market and free trade (winners).

V5. The fragmented and focused response in a specific sector of the civil society to the reforms in the sector and its null organizational antecedents.

Rosa Alva de la Selva, Virgilio Caballero, Manuel Camacho Solís, Purificación Carpinteyro, Tatiana Clouthier, Gael García Bernal, Daniel Gimenez Cacho, etc. The critical public document signed by the members of the CDF can be consulted at http://www.amedi.org.mx/prensa/comunicados/867-lucartrarreforma-en-comunicaciones-de-pena-nuno

V6. The high technical expertise of the subject of Telecommunications raises the cognitive cost of its subjects, and limits its deliberative potential for broad social sectors.

V5 + V6. Limited, fragmented and little influence of the counterreform proposed by sectors of Mexican civil society to the initiative of the Law.

Derived from the exposed above it can be inferred that:

V1 + V2 (A1): The «Pacto por México» generated a scenario of cooperative negotiation and allowed the integration of «winning» legislative coalitions, majority in support of the initiative of the Executive, including the opposition political actors.

V3 + V4 (A2): The international context favorable to the flow of capital and investment in the telecommunications sector marked by digital technological convergence and the integration of Mexico into international treaties of neoliberal orientation (North American Free Trade Agreement, Alliance of the Pacific), plus the high capacity of structural influence of the media/technological actors (A2), facilitated the identification of the interests and expectations of this business sector with the policy makers, making them attractive 'partners' of «trade policy coalitions» geared towards the market and free trade.

V5 + V6 (A3): The limited influence of civil society in the negotiation and approval of the Telecommunications Law in Mexico.

As can be seen, the various contextual, organizational, institutional and leadership variables that allow explaining how the presidential initiative to reform telecommunications can be approached, who are its main supporters or opponents, which factor or institutional dynamics generated the incentives for cooperation and construction of the legislative majority needed for its approval, which roles played the media/technological actors in the process of discussion and negotiation, and what were the main critical reactions of civil society.

#### 5. Final Considerations

The paper attempts to draw attention to the specificity of the political negotiation process that allowed for the approval of the Telecommunications and Broadcasting Act in Mexico in 2014. Its specificity reveals the complexity of this process by focusing on diverse aspects that link the political context, the institutional dynamics, the

organizational potential of society and the interaction of interests, expectations and strategies of the various actors involved.

Any political initiative converted into a legislative proposal produces a scenario of negotiation between the various political actors, deploying their resources and influences. However, the political outcome generally activates several dynamics conditioned in the first instance by the rules and institutions, but also by the ability to influence the outcome of other involved actors. In the case covered, the capacity of structural influence of the business sector in the economic dynamics makes it a potential political actor. The convergence of interests and expectations within the elites, conditioned by international situations and the correlation of forces in the competitive dynamics of political actors, exert a decisive influence in the design of public policies. The capacity for pressure, determined by the organizational history and political activism of certain sectors of civil society, provides explanatory power; that is, the capacity of certain social sectors to deliberatively construct a demand and turn it into an issue of deliberation and political negotiation.

In addition to the above, the present research aims to draw attention to the relationship between the right to information and the quality of democracy under construction. As Levine and Molina acknowledge, if formal political equality (each person is one vote) is a minimum requirement of democracy, substantive political equality, one of whose main components is the distribution of cognitive resources among the population, is an indicator of the quality of democracy given its direct link with one of its crucial elements: the extent to which the electorate can make informed political decisions (2007, p. 24). Different forms of content elaboration and expression can impact on the informative capacity of audiences/voters, and when the agendas are differentiated, the «agenda setting» effect of media with greater technological infrastructure - or monopolistic contexts - but emphatically commercial or with strategic links with politicians, will be less on the citizen/elector.

Finally, today's democracies involve multiplicity of interactive, selective, informative, elective, deliberative processes; where ever the civic participation must have a lower cost, and conversely, a greater impact on the control of the exercise of power; that is to say, a greater incidence in the decisions of the public policies, the account of the

elites, the rule of law, the consensuses that base the legitimacy of certain laws, the new forms of citizen participation, etc. Thus, the connection between the study and the literature of democratic quality in Latin America is explicit and relevant.

#### 6. References

- Acuña, C. H., Smith, W., & Wolfson, L. (1996). La economía política del ajuste estructural: la lógica de apoyo y oposición a las reformas neoliberals. *Desarrollo Económico*, 36(141), 355-389. doi: https://doi.org/10.2307/3467397
- Barreda, M. (2011). La calidad de la democracia. Un análisis comparado de América Latina. *Política y Gobierno*, 18(2), 265-295.
- Culebro M.J., González, C. (2013). Regulación y evolución de organismos reguladores en telecomunicaciones: el caso de México y Francia. Gestión y Políticas Públicas, 12(1) Vol. 45-83.
- Ellner, S. (2012). The Distinguishing Features of Latin America's New Left in Power. Latin American Perspective, 39(1), 96-114. doi: https://doi.org/10.1177/0094582X11425333
- Haggard, S. & Kauffman, R. (1995). The political economy of democratic transitions, Princeton University Press.
- Hallin, D. (2000). Media, political power and democratization in Mexico, en *De-West-ernizing Media Studies*, J. Curran & Myung-Jin Park (eds.), London: Routledge.
- Heredia, B. (2002). Estructura política y reforma económica: el caso de México, en Lecturas sobre el cambio político en México, México: CIDE-FCE.
- Holzner, C. (2007). Voz y Voto: participación política y calidad de la democracia en México. *América Latina Hoy*, 45, 69-87.
- Huerta-Wong, J. E., & Gómez, R. (2013). Concentración y diversidad de los medios de comunicación y las telecomunicaciones en México. Comunicación y Sociedad, 19, 113-152.
- Katz, C. (2012). The Singularities of Latin America, en Socialist Register, 48, UK: The-MerlinPress.
- Kitzberbger, P. (2009). Las relaciones gobierno-prensa y el giro político en América Latina, POSTData, 14, 157-181.
- Kitzberger, P. (2010). The Media Activism of Latin America's Leftist Governments:

  Does Ideology Matter? GIGA Research Unit: Institute of Latin America Studies,
  No. 151.
- Levine, D. H., & Molina, J. E. (2007). La calidad de la democracia en América Latina. Revista América Latina Hoy, 45, 69-87.
- López-Leyva, M.A. (2015). El episodio reformista en México (2012-2014): explorando las razones del cambio en la segunda alternancia. Estudios Políticos, 35, 61-85.
- Mastrini, G., & Becerra, M. (2009). Los dueños de la palabra. Buenos Aires: Prometeo.
- Mariscal, J., & Rivera, E. (2005). Organización industrial y competencia en las telecomunicaciones en América Latina: estrategias empresariales, Santiago de Chile: CEPAL.

- Montes-de-Oca, L.B. (2014). ¿Innovaciones democráticas? Análisis del Consejo Consultivo de telecomunicaciones en México. *Revista Mexicana de Sociología*, 76(2), 287-320.
- Piedras, E. (sf). Regulación y Desempeño del Sector de Telecomunicaciones: el impacto en el Bienestar, la productividad y la competitividad en México. México DF: CIDE.
- Porto, M., & Hallin, D. (2009). Media and Democratization in Latin America. *International Journal of Press/Politics*, 14(3), 291-295. doi: https://doi.org/10.1177/1940161209336231
- Thacker, S. (2000). Big Business, the state, and free trade. Constructing Coalitions in Mexico, Cambridge University Press.
- Tovar-Landa, R. (2015). La Reforma en Telecomunicaciones y Radiodifusión: un enfoque crítico. El Cotidiano, 190, 41-47.
- Razo, C., & Rojas-Mejía, F. (2007). Del Monopolio de Estado a la convergencia tecnológica: evolución y retos de la regulación de telecomunicaciones en América Latina. Santiago de Chile: CEPAL-ONU.
- Rangel, M. P. (2007). Reforma microeconómica y arreglos institucionales: la política de competencia económica en México. Revista Mexicana de Sociología, 69(1), 39-68.
- Rodríguez-Arechavaleta, C. M. (2012). Lógica mediática y calidad de la democracia. Apuntes de un modelo normativo, en *La buena Democracia*. *Claves de su calidad*, Universidad de Granada, pp. 203-215.
- Rodríguez-Arechavaleta, C. M. (2011). Apuntes sobre el Derecho a la Información en México en los años 70'. Entre el Nuevo Orden Informativo Internacional y la crisis de legitimidad interna. Derecom, 6, 1-17.
- Rozas-Balbontín, P. (2002). Competencia y conflictos regulatorios en la industria de las telecomunicaciones de América Latina. Santiago de Chile: ILPES, CEPAL.
- Sánchez-García, K. (2014). La Reforma en Telecomunicaciones y las negociaciones en el Congreso. México Interdisciplinario, 4(7), 69-83.
- Santander, P. (2014). Nuevas leyes de medios en Sudamérica: enfrentando políticamente la concentración mediática. Convergencia, 21(66), 13-38.
- Schneider, B. R., & Wolfson, L. (2005). La organización de los intereses económicos y las coaliciones políticas en el proceso de las reformas de mercado en América Latina. *Desarrollo Económico*, 45, 179.
- Solís-Leere, B. (2013). Derechos por construir: los derechos de los ciudadanos en la reforma constitucional de 2013 en telecomunicaciones, radiodifusión y competencia. *El Cotidiano*, 181, 17-23.
- Sosa-Hernández, G. G. (2016). Los grupos de poder mediático ante el cambio institucional: la reforma en telecomunicaciones (2013-2015). Estudios Políticos, 9(39), 91-119.
- Valdés-de-Vega, M.E. (2016). Reforma a telecomunicaciones y radiodifusión en México: la perspectiva de la Asociación Mexicana del Derecho a la Información. Tla Melaua, 9(39), 188-212.
- Wohlers, M. (2008), Convergencia tecnológica y agenda regulatoria de lastelecomunicaciones en América Latina. Santiago de Chile: CEPAL-ONU.



www.retos.ups.edu.ec

# Vigil and Surveillance: A content analysis of the National Registry of Internet Access in Brazil

## Vigilia y vigilancia: Análisis de contenido del Registro Nacional de Acceso a Internet en Brasil

**Fernando Nobre Cavalcante** is a doctoral candidate in Media Studies at the Federal University of Rio Grande do Norte and a lecturer at UNI7 (Brasil) (femandocavalcante@gmail.com) (http://orcid.org/0000-0003-2803-5291)

#### Abstract

The legalization and institutionalization of the surveillance of the digital information of the Brazilian citizens has been promoted by interests of Protestant political groups that argue ideas of faith and morality in draft laws that promote new forms of Internet control. Since 2015, different bills have threatened the right to privacy and freedom of expression in digital communications, guaranteed by Act No. 12.965, of April 23, 2014 (Civil Internet Framework). The present research analyzes the critical points of the projects of law of control of Internet promoted by evangelical politicians and justified in moral arguments of protection of children and adolescents. The present article establishes a theoretical dialogue with the postulates of Manuel Castells in an attempt to demystify the arguments in favor of the control and uses a qualitative investigation by means of a survey and analysis of content of the bills of laws that still are processed in the National Brazilian Congress. It is evident that the current draft legislation establishes fruitful threats to the guiding principles, guarantees, rights and duties for the use of the Internet in Brazil, camouflaged in moralistic narratives and dissonant and interested arguments of Law No. 12,965, leading to the understanding that there are eminent possibilities of expanding the control and monitoring of the information consumed and produced by Brazilian Internet users.

#### Resumen

La legalización e institucionalización de la vigilancia de las informaciones digitales de los ciudadanos brasileños han sido promovidas por intereses de grupos políticos protestantes que argumentan ideas de fe y moralidad en proyectos de leyes que potencian nuevas formas de control de Internet. Desde 2015, diferentes proyectos de ley amenazan el derecho a la privacidad y a la libertad de expresión en las comunicaciones digitales, garantizados por la Ley Nº 12.965, del 23 de abril de 2014 (Marco Civil de Internet). La presente investigación analiza los puntos críticos de los proyectos de normativas de control de Internet promovidos por políticos evangélicos y justificados en argumentos morales de protección de niños y adolescentes. El presente artículo establece un diálogo teórico con los postulados de Manuel Castells en un intento por desmitificar los argumentos a favor del control y utiliza una investigación cualitativa por medio de un levantamiento y análisis de contenido de los proyectos de leyes que aún se tramitan en el Congreso Nacional brasileño. Se evidencia que los actuales proyectos de ley establecen amenazas fecundas en los principios orientadores, garantías, derechos y deberes para el uso de Internet en Brasil, camuflados en narrativas moralistas y de argumentos disonantes e interesados de la Ley Nº 12.965, llevando al entendimiento que hay eminentes posibilidades de ampliación del control y vigilancia de las informaciones que consumen y producen los internautas brasileños.

#### Keywords | Palabras clave

Civil Internet Framework; National Registry of Internet Access; Internet control in Brazil; documentary analysis.

Marco Civil Internet; Registro Nacional de Acceso a Internet; control de Internet en Brasil; análisis documental.

#### 1. Introduction

A little more than a year before the request to accept the process of removal of President Dilma Rousseff, Law No. 12,965, of April 23, 2014 - also known as the "Civil Internet Framework" - was sanctioned. In this area, topics such as Internet neutrality, registration of connection and navigation data, between points that establish inalienable rights such as freedom of expression, privacy, privacy of users and inviolability of communications, are guaranteed, although these principles are currently under threat.

Bill 2390/2015, authored by federal deputy Pastor Franklin and 5096/2016, proposed by federal deputy Célio Silveira, threaten the confidentiality of data of Brazilian Internet users and expect to be exposed before the Commission on Science and Technology, Communication and Informatics (CCTCI) of the Brazilian Congress by Misionero José Olimpio. The draft laws referenced above refer to the "Civil Internet Framework" which is, to date, the only legislative expression that regulates the rights and duties of citizens in virtual environments in Brazil.

These legislation draft deal with legislative initiatives of the evangelical group of political and religious leaders in the National Congress, whose arguments stem from the preservation of the rights of children and adolescents; although this justification succumbs to the real interests of greater control of data and the navigability of the Brazilian citizen by the proposal of institutionalization of a "National Registry of Internet Access".

The present article begins by discussing the moralist and pragmatic dichotomy of information control in the paradigm of the information society, through an analysis of the postulates of Manuel Castells, to later analyze, using the qualitative technique of content analysis of interpretive basis, the "Civil Internet Framework" law, compared to the new legislative proposals previously mentioned. For the content analysis, the data was collected with the highest number of words that appeared in the current Law, in the projects mentioned above and the analysis of the main points that the Internet Management Committee explains contrary to the project. Thus the present research will try to clarify if the legislative proposals would mean a greater control of the digital life of the Brazilian citizens by the governmental institutions.

#### 2. Network society: Promise and control

In many countries we have seen new forms of information control evolve on the Internet directly affecting the freedom of citizens who are subject to repression by their governments (Murdoch & Roberts, 2013). Political changes also evolve ways of maintaining control over access to information for citizens (Kerr, 2014). In the information society, promise and control seem to blend with the same power of agglutination of the production and consumption of digital goods. The promise of freedom and democratization of information overlaps with the real policies of control and broad access of information by private empires and States. For Manuel Castells (2005) technology is the new mode of production in our current society, where information is incorporated into a globalized economy. It is significant that the author (op cit) focuses on informational productivity as the leverage engines of economic growth, since they still organize societies around their centuriesold logic of appropriation of work processes and accumulation of wealth. These are the immutable aspects of the dynamics in which the capitalist duality of charm and control, wealth and misery coexists. Doubtful concepts contained throughout the Castells trilogy: The Information Age: Economy, society and culture. Puyosa (2015) also agrees that new forms of state control are emerging in the information society by empirically investigating the concept that he calls the «dictator's dilemma» in the Venezuelan case.

In the web we find the delivery of «charismatic action» (Pierucci, 2003) by entrepreneurs who risk their own business in the digital ecosystem, the delivery of the intellect and talent of programmers, designers, managers of communication and marketing, administrators and the whole collective body of collaborators and creators of contents. On the other hand in the interactions is the enchanted soul of consumers who trust and provide their information in exchange for digital services, becoming users of informational goods that have not yet awakened to the media bias behind a gratuity in the provision of services - applications, websites, offers, among others - that until now have never been necessary for social welfare, but that are converted by the cyclical and endless massification of the consumer culture of buying and disposing (Gorz, 2005). In that game of Network society also appear the rulers who, in search of expanding their electoral niches, try to use the

internet for their personal interests through public policies, comforting speeches or promises in the electoral campaigns.

Cleland & Brodsky (2012) recall in their work that USA Today revealed that in 2004, 98% of federal campaign donations made by Google officials went to Democratic Party politicians: "Eric Schmift supported Barack Obama, participated actively in his campaign and was a member of the Advisory Council of the President for Science and Technology and his Transitional Council on the Economy "(op cit, p.201). US news site Sputnik News in April 2015 revealed that WikiLeaks founder Julian Assange predicted that Google could play a crucial role in Hillary Clinton's 2016 presidential campaign because, according to the report, the director of "Google Ideas, "Jared Cohen was an adviser to Clinton. In Brazil, far from Assange's assertions, we see similar attitudes on the part of religious leaders who assume political functions, such as the congressional group of evangelicals of the National Congress, which since 2015 have proposed bills that endorse the relationship of control of the State for the exercise of citizens' rights.

"The internet is not a guarantee of freedom, but it makes oppression more difficult. The censorship allows identifying and punishing the messenger, but cannot stop the message", says Manuel Castells to the Brazilian newspaper Zero Hora¹. Castells (2005), when mentioning the slogan of the presidential campaign of Bill Clinton in 1992, finds that globalization was in that government the main strategy of US economic policy, while a greater deregulation and liberalization emerged - domestic and international - thus postulating:

"The answer is clear to the main globalizer, the US government: a more open and integrated economy is advantageous for US companies. This is due to the technological advantage and superior administrative flexibility enjoyed by the United States compared to the rest of the world. Along with the long-standing presence of US multinationals around the world and with the US's hegemonic presence in international trade and finance institutions, globalization is paramount to increasing US economic prosperity, though certainly not for all businesses and not for the entire people of the United States. This economic interest is something that Clinton and his economic team, especially Rubin, Summers and Tyson understood well. They worked hard to spread the liberal

<sup>1</sup> Interview offered on 06/09/13. Available at: https://goo.gl/DbRsqK (06/25/17).

gospel in the world, applying US economic and political force when it was necessary" (Castells, 2005, p. 184).

In other words, for Castells (op. Cit), in the absence of external conflicts or shocks-political revolts, wars, natural disasters-the transformation of capitalism is driven by attempts to sustain economic growth simply because the system itself has an expansionist logic. The internal competitive pressures of the national economies reward those whose productivity is high. As a consequence, Castells maintains the idea that if we understand how contemporary society changes, we have to start by analyzing the strategies implemented by the economic agents aiming to increase the efficiency of these, charging in this context greater meaning the famous phrase of the sociologist Daniel Bell "do much with little" (quoted by Stalder, 2006, p.43).

Stalder (2006) understands that the reference to Bell is not banal. Indeed, Bell's work played an important part in Castells's critique of his post-industrialist theory, which for a long time dominated the analysis of contemporary economic changes and favored his theory. Among the scholars who analyzed the transformations of the economy in the last quarter of the twentieth century, Daniel Bell held a prominent position for a considerable time. Since the publication of *The Coming of Postindustrial Society* in 1973, Bell's theory has had a profound influence on the discourse on economics in the information age. His basic plot was widely popularized by futurists such as Alvin Toffler, particularly in The *Third Wave*. Both authors detected a historical change in the processes of creation of goods for the provision of services like essential activity of the advanced economies.

This transformation, according to the authors quoted in reference, is more or less equal in importance to the Industrial Revolution, which displaced the bulk of economic activity in extracting resources from nature through agriculture and mining for the production of goods in the mass markets. Stalder (2006: 43) reminds us that Bell stated that "industrial societies are commodities that produce societies. Life is a game against the manufactured nature [...] A postindustrial society is based on services. Consequently, this is a game between people. "

Continuing with Stalder's analysis (op. Cit.), Castells used post-industrialism theory since the mid-1970s as an enhancement to discuss with opposing arguments. Despite his dislike of futurism - so character-

istic of his postindustrial analysis - Castells' perspective overlaps with Bell's most important themes. In the first place, both place primarily crucial changes in the level of technical production relations (modes of development) and only secondarily to the level of their social relations (modes of production). This allows them to talk at the same time about a profound change in the way in which economic principles are created and on the continuity of the way in which the principles are appropriate. This distinction has long been a central thesis for Castells' analysis, especially in the trilogy of the «Information Age», more specifically in the first volume The Network Society, where the author defends a new form of capitalism which emerged in the last quarter of the twentieth century.

Castells' own argument can be understood as an attempt to overcome what he sees as fundamental flaws in the approach, while maintaining them as an important point of reference. Castells's critique of postindustrialism culminates in his analysis of the restructuring of an era: the economic crisis of the 1970s; and is divided into four main concepts of network society: i) the internationalization of the economy; (ii) the growth of global financial markets; (iii) network companies; iv) and the individualization of work.

The massification of new technological services through the sale of advertising space in the entangled flows of information reveals the same old structural bases of accumulation and control. At the heart of this paradigm we see the unquestionable attempt to control information with private interests. As Cleland and Brodsky (2012, p. 123) argue, "The microeconomic component is more important. It is where the traffic or behavior of consumers are analyzed, allowing Google to predict such behavior, attract more users and sell more ads.

The gratuitousness in the services of firms that produce information and knowledge through innovation are examples that are contextualized in the (in) explicable ambivalence. In fact, their business is to facilitate, streamline and organize our lives in the most varied general textures of our social experiences, as explained by Silverstone (2005); and they do so when considering the needs created in the cyclical consumer culture (Bauman, 2008) where the immediate want supplants desire and need.

It seems that today, more than ever, the scenario predicted by Toffler (2007) in *The Third Wave*, where consumers are closer to the

appropriation of the mode of production having a status of producer-consumers (*prosumers*) is more real when we observe the control of intangible inputs, control of information. Would we be faced with a contradictory knowledge economy in the constancy of surveillance? For Gorz (2010, p.12) "The value of knowledge in the capitalist economy is indefinable... Its price has no objective foundation and is continuously fluctuating," following the same logic of the capitalist system: Control and promise.

# 3. "Civil Internet Framework" versus "National Internet Access Registry"

Law 12 965 enacted on April 23, 2014 by President Dilma Rousseff established rights and duties regarding access to information in Brazil. It is a rule framed in the Brazilian Constitution that contributes to maintaining a "free and secure" Internet, although it has not been exempt from being a point of continuous shocks and heated debates in the political sphere of Brazil. Known as the "Civil Internet Framework", the law appeared along with 36 other projects of similar thematic proposals and included controversial topics such as neutrality and citizen rights of access to the network. This article highlights four points collected in one of the collections of the Legislation series, from Edições Câmara published in 2014.

The first point of the "Civil Internet Framework" proposal refers to the relative neutrality of networks, which allows traffic control by private operators, seeking to maintain greater transparency with the user, expressed in the third chapter, article ninth:

II - act with proportionality, transparency and isonomy; (...) III - to previously inform in a transparent, clear and sufficiently descriptive way to its users on the management practices and traffic mitigation adopted, including those related to network security. (Marco Civil da Internet, 2014, p. 32).

On the collection of user information, the Framework guarantees, within a period of up to one year, the storage of connection data relating to navigation (IP address used, connection time, among others) by Internet providers. The objective, which in the background was to identify the user, would also protect him from cyber-crimes. It was also

justified in protecting the personal privacy of the citizen, sanctioning any breaches by suppliers:

Art. 10. The custody and availability of connection records and access to Internet applications covered by this Law, as well as personal data and content of private communications, should address the preservation of privacy, private life, honor and image of the parties directly or indirectly involved. [...] Art. 11. In any operation of collection, storage, custody and treatment of records, personal data or communications by connection providers and Internet applications in which at least one of these acts occurs in national territory, Brazilian legislation and the rights to privacy, the protection of personal data and the secrecy of private communications and records must be respected. (Marco Civil da Internet, 2014, p. 33-34).

The third point refers to the user's browsing history record. According to the original proposal, Internet providers were prohibited from storing any data referring to the user's browsing history - except when the judiciary ordered otherwise - and was provided to content providers, such as social networking companies, news portals and entertainment or search engines, they had some hosting service information:

Art. 14. In the provision of connection, onerous or gratuitous, it is forbidden to keep records of access to Internet applications. [...] Article 15. The Internet application provider established in the form of a legal person and exercising that activity in an organized, professional and economic manner shall maintain the respective records of access to Internet applications, In a controlled and secure environment, for a period of 6 (six) months, in accordance with the Regulation. [...] § 20 The police or administrative authority or the Public Prosecutor's Office may request that any Internet application provider be cautioned that access records for Internet applications are stored [...] (Marco Civil da Internet, 2014, p. 36).

The fourth controversial point included in the Framework normalizes the responsibility of content in the internet, expressed in the practice of "notification and withdrawal of air". This definition refers to infringing materials protected by copyright, defamatory or libelous:

Art. 18. The Internet connection provider shall not be held liable for damages arising from the content generated by third parties. [...] Art. 19. In order to ensure freedom of expression and to prevent censorship,

the Internet application provider may only be held liable for damages arising from content generated by third parties if, following a specific court order, do not take the measures to, within the framework and within the technical limits of its service and within the aforementioned deadline, make available the content indicated as infringing, except for legal provisions to the contrary. [...] Art. 20. Whenever it has contact information of the user directly responsible for the content referred to in art. 19, it will be up to the internet application provider to communicate the reasons and information regarding the unavailability of the content, with information that allows the contradictory and ample defense in court, unless expressly provided by law or express judicial determination to the contrary. (Marco Civil da Internet, 2014, p. 37).

In summary, neutrality policies went on to legislate and protect Internet traffic by allowing the user to be informed of the policies and conditions of the contract. With the current Law of «Civil Internet Framework» the user will have to give express authorization for the collection of their browsing habits and even if you choose not to provide the information, you may be prevented from using the services if you do not accept the terms established by the site. One of the points of conflict regarding the control of information by private companies and the government refers to the mandatory storage of logs of connection and navigation defined by a specific period in the legislation, but at the same time not presenting obligation of continuous storages in some cases made explicit by the Law. In addition, another important point to the right of the user is that constitutional rights are also validated for the digital reality.

However, two years after the «Civil Internet Framework» was sanctioned, the Comité Gestor da Internet no Brasil (hereinafter CGI. br) issued a public notice on October 18, 2016, contrary to the legislative proposals that intended to create a «National Registry of Internet Access». One of the attributes of CGI.br is the proposal of rules and procedures related to the regulation of activities on the Internet. The body was radically opposed to the draft law led by the Congressional Evangelical Front of the National Congress, composed entirely of evangelical deputies, defenders of greater control of access to information and monitoring of Brazilian citizenship:

THE INTERNET MANAGEMENT COMMITTEE IN BRAZIL - CGI.br, after becoming aware, on October 05, 2016, of the reading of

the approval opinion and of the substitute presented to the Draft Law 2390/2015, 3597/2015, 5016/2016 and 5096/2016, as well as the joint request from the members of the Committee on Science and Technology, Communication and Information Technology / CCTCI, [...] MAKE IT PUBLIC. Express great concern with the proposal to create the so-called "National Registry of Internet Access", which has technical barriers to its implementation, as well as neglects parental control and solutions that include all aspects involved to guarantee a free, open. Democratic Internet and make it a safe environment for children and adolescents. 2. To argue that with the pretense to safeguard risks inherent in Internet browsing - which can and should be mitigated by the education of users and their parents or guardians- should not justify the creation of inconsistent controls that are likely to be circumvented, against fundamental principles enshrined by the Civil Internet Framework, creating a new range of risks for citizens that are intended to be protected. (CGI.BR, 2016)<sup>2</sup>.

Draft Laws Nos. 2390/2015, 3597/2015, 5016/2016 and 5096/2016, grouped in the eventual Law that refers to the «National Registry of Internet Access» and are still pending in the National Congress<sup>3</sup>, have been strongly criticized for proposing amendments that threaten the main principles and rights postulated in the "Civil Internet Framework" explained above.

#### 4. Materials and method

For the present investigation a survey of the main Law projects that are currently in process in the Brazilian National Congress and that denote new forms of control of the Internet is made, to later carry out an analysis of content of interpretative base assigned of quantitative form to the most frequent lexical keys in these verbal documents (transcripts) and legislative documents. For this purpose, the content of the main verbal and non-verbal expressions of the laws already discussed was analyzed, comparing the discourse presented in these documentary units with the view of repudiation of the official position papers of the association representing civil society (CGI.br) contrary to the project «National Registry of Internet Access».

The public policies that promulgate the control of the Internet, rather than in the legislative texts themselves, show power by written,

<sup>2</sup> Available at: https://goo.gl/rUYhwk (04/26/17).

<sup>3</sup> Until the date of preparation of this article on 01/08/17.

verbalized and mediated words. As for the preponderant presence of texts in contemporary social phenomena, especially in governmental political communications, Boréus & Bergström (2017) indicate that media and communication studies must cope with textual analysis as a research methodology of the fields of Social Sciences and, in particular, Communication. In order to organize the different analytical biases to discuss "power", written, verbal or published discourses will be analyzed, taking into account both political pronouncements and media critiques.

The content analysis is also used for coding in a quantitative or qualitative prism, in order to systematize, define, categorize or describe the meaning of texts. At the same time, research objects, approaching quantitative and qualitative biases, include in these analyzes the production of traditional and digital media content (Boréus & Bergström, 2017).

When choosing content analysis, the researcher can make comparisons based on quantifications of different elements in texts, which may be necessary if the objective is to review the changes in the course of time of certain content. The main characteristic of this type of analysis is the understanding that when sizing the frequency of certain words characteristics outside the text can be perceived. Content analysis can focus on the ideal and interpersonal aspects of texts, remaining as a deductive method in the search for hypothetical and theoretical elements. The main criticisms of this type of method are that not everything can be generalized in frequency, because there is a greater analytical character to what is more explicit than implicit, especially in the technique of the search of codes, and in relation to questions of validation and interpretation of the researcher to overcome the reality of the content, as explained by (O'Connell, 1999), McMillan (2009), Krippendorff (2013), Schreier (2014) and Boréus & Bergström (2017).

For this research, the ATLAS.ti platform was used to survey the frequency of key words (lexicons) present in the written and/or verbal texts of the main points between the two draft Laws referenced (PL 2390/2015 and 2390/2015), including a comparison with the «Civil Internet Framework». In addition, the keywords most frequently present in the «Civil Internet Framework» (see Chart 1) and the position of the Brazilian Internet Management Committee (see Chart 2) were quantified.

For this research, the ATLAS.ti platform was used to survey the frequency of key words (lexicons) present in the written and/or verbal texts of

the main points between the two draft Laws referenced (PL 2390/2015 and 2390/2015), including a comparison with the «Civil Internet Framework». In addition, the keywords most frequently present in the «Civil Internet Framework» (see Chart 1) and the position of the Brazilian Internet Management Committee (see Chart 2) were quantified.

#### 5. Results

Chart 1. Comparative analysis of the frequency of keywords contained in the «Civil Internet Framework» and in Law 12,965 / 2014 and 2390/2015

Analyzed text	Author	Words with higher textual frequency (in written and verbal forms)				
(1) Law No. 12.965/2014	Signed by the president Dilma Rousseff	"INTERNET" Frequency: 70	"APPLICA- TIONS" Frequency: 35	"RECORDS" Frequency: 35	"LAW" Frequency: 26	
BRAZILIAN CIVIL RIGHTS FRAMEWOR- KFOR THE INTERNET			Keyword that was not considered: "art" (43)		"ACCESS"; "DATA"; "CONNECTION" Frequency: 23  "CONTENT" (Frequency: 20); "FORM"	
(2)	"Pastor" Franklin	"INTERNET"	"ACCESS"	"REGISTER"	(Frequency: 19)  "PUBLIC"; "TEENA-GER"; "CHILD"	
Bill No. 2390/2015	(Political Party: PTdoB, state of Minas Gerais)	Frequency: 27	Frequency: 24	Frequency: 20	Frequency: 11	
(3) Bill No. 5016/2016	Célio Silveira - (Political party: PSDB, state of Goiás)	"ACCESS" Frequency: 15	"INTERNET" Frequency: 12	"LAW" Frequency: 11	"APPLICATIONS"; "TEENAGER" Frequency: 9	
(4) Speech delivered at the session hall of the Brazilian House of Representatives (Chamber of Deputies) on April 27, 2016, by the Congressman Célio Silveira	Célio Silveira - (Political party: PSDB, state of Goiás)	"VIDEOS"; "INTERNET" Frequency: 10	"LAW" Frequency: 07	"RATING"; "VIOLENCE" Frequency: 06	"INDICATIVE"; "SITES"; "SCENES"; "SEX"; "YEARS" Frequency: 5	
(5) Speech delivered at the session hall of the Brazilian House of Representatives (Chamber of Deputies) on April 14, 2016, by the Congressman Célio Silveira	Célio Silveira - (Political party: PSDB, state of Goiás)	"ACCESS"  Frequency: 15	"INTERNET"; "LAW" Frequency: 12	"APPLICA- TIONS" Frequency: 9	"WEBSITES" "TEENAGERS"; "CHILDREN" Frequency: 8	

## Chart 2. Position of the Internet Management Committee of Brazil contrary to the draft Law «National Registry of Internet Access»

- a. the online protection of children and teenagers through the creation of a "National Register of Internet Access", which would theoretically restrict access to "inappropriate" content single-handedly classified by the "information providers" themselves, diminishes parents' control over the type of content their children should consume, relegating them to a secondary role in such a crucial part of the educational process;
- b. there are several types of computer software that allow parents to control the content obtained by children and teenagers, which is ensured as an option up for election at any Internet access terminal and should be aspired by public policies under the terms established by the Article 29 of the Law No. 12.965/2014 (the "Brazilian Civil Rights Framework for the Internet"). This type of technology gives parents the ability to control the information consumed by their children, which better fits their role as protagonists in this important part of the educational process and contributes to the freedom of choosing their own family dynamics as ensured by the Brazilian Federal Constitution (Article 226, § 7);
- c. it's necessary to combine the efforts of the State, the civil society, the scientific and technological communities, and the connection and application providers in order to systematically establish parameters to deal with the circulation of inappropriate material throughout the Internet;
- d. should control systems become a mandatory feature in every piece of equipment, the computer industry would be forced to include this new functionality, which would inevitably affect the final consumer, ultimately impacting the dissemination of connectivity in Brazil and the capability of small and medium-sized companies to function;
- e. in a local area network (a residential or a corporate one), there might be several users, considering that most of the time a single public IP address is shared. Therefore, the connection provider would have to authenticate each one of the thousands of accesses of the thousands of nodes in their network, which has nothing to do with the so-called IP exchange or, particularly, with the hardware interface of the Internet router. In this case, which includes wireless networks, the authentication process would take place only in the main access, and only once, making it impossible to control each user:
- f. finally, any sort of registration system would be easy to deceive. In the first place, there might be a fake authentication, such as registrations that haven't been created or used by their real owners. Secondly, there are several tools for concealing the connection, which would make it untraceable by the providers and, ultimately, by the "National Register of Internet Access";

Source: CGI.BR (2016).

Chart 3. Comparative analysis of frequency of keywords contained in chart 2

Analyzed text	Author	Words with higher textual frequency (in written form)				
(6) Official note from the Brazilian Internet Steering Committee (2016)	The Brazilian Internet Steering Commi- ttee	"INTERNET" Frequen- cy: 6	"ACCESS" Frequen- cy: 5	"CONTROL"; "CONNECTION"  Frequency: 4	"CONTENT" "PROVIDERS" Frequency: 3	

In addition to the central object of the investigation of the words "Internet" and "access", Chart 1 shows the different arguments used in the written and spoken texts indicated in texts (2), (3) and (4), as "teenagers" and "children". This puts in evidence the moral values that contextualize the position of the evangelical group that discuss - and justify - issues related to the family in many of their speeches for a matter of eminent technical nature and that involves questions of control of information of the citizen. The goal, according to the evangelical deputies, is "to prohibit the access of children and adolescents to electronic sites with inappropriate content." To do this, the proposal establishes the creation of a national registry of people and sites, with personal data that must be verified for each access. The solution indicated by the «National Registry of Internet Access» would impose the creation of a database in which they would be registered "among other information, the full name, full address, number of the official identity document and registration number in the Cadastre of Individuals (CPF) of the Ministry of Finance, "in addition to a list of sites with content inappropriate for children and adolescents. The dissonant character between the points in the texts (1) and the other in Chart 1 is also realized, making it possible for the impression that the new project expands beyond the attention formalized in the current Law «Civil Internet Framework».

On the other hand, Chart 2 shows the position of CGI.br in the official note divulging the contrary points to the new draft Law, which goes beyond the arguments drawn from Chart 1, especially in the greater number of key words in written and spoken texts. These facts are summed and observed with a clear clarity in the quantification expressed in Chart 3 as "control", where the root "control" denotes denotatively that the arguments of the Law in question may have an underlying interest.

#### 6. Conclusion

The Committee on Science and Technology, Communication and Information Technology (CCTCI) of the Chamber of Deputies has on the voting agenda the report of draft law (PL) No. 2,390 / 2015, which consolidated to PL 5016/201, propose the creation of a «National Registry of Internet Access» advocated by the evangelical group and political religious leaders in the Brazilian Congress, who argue that the concern for the protection of children and adolescents has been gaining support from the population in Brazil.

This article quantitatively analyzed, through an interpretative content analysis, the highest incidence (frequency) of key words uttered by verbal and written discourses on these bills that threaten important points of the «Civil Internet Framework». Compared with the analyzed texts of the bill, it can be contrasted with the critical points that the Internet Management Committee of Brazil positioned in 2016 in an official note. It was perceived that words like "adolescent", "child" and "access" can be confused with "control" in a connotative or even denotative way. As future lines of research, the present research has identified that it deserves to be expanded for a more qualitative analysis in future events and concludes that the current project in the Brazilian Legislative Branch can intensify the use of citizens' information, navigability data and history of the activities mapped through the registry, causing a direct threat to the rights of users.

#### 7. References

Boréus, K. & Bergström, G. (2017). Content Analysis. En Bergström, Göran & Boréus, Kristina (eds.) Analyzing text and discourse: Eight approaches for the Social Sciences. London: Sage Publications.

Castells, M. (2005). A Sociedade em Rede (8ª ed). São Bernardo do Campo: Paz e Terra. \_\_\_\_ (2008). O Poder da identidade (6ª ed). São Paulo: Paz e Terra.

Cleland, S. & Brodsky, I. (2012). Busque e destrua: por que você não pode confiar no Google Inc. São Paulo: Matrix.

Dovring, K. (2009). Quantitative Semantics in 18th Century Sweden. En K. Krippendorff & M.A. Bock (eds.) *The Content Analysis Reader*. London: Sage.

- Gorz, A. (2005). O imaterial: conhecimento, valor e capital. São Paulo: Annablume.
- Kerr, O. S. (2014). The Fourth Amendment and the Global Internet. GWU Law School Public Law Research Paper No. 2014-30; GWU Legal Studies Research Paper No. 2014-30. Disponible en SSRN: https://ssrn.com/abstract=2428042
- Marco Civil da Internet (2014). Câmara dos Deputados, Brasil. Brasilia: Edições Câmara.
- McMillan, S.J. (2009). The Challegen of applying Content Analysis to the World-Wide Web. En K. Krippendorff & M.A. Bock (eds.) *The Content Analysis Reader.* London: Sage.
- Murdoch, S. J. & Roberts, H. (2013). Internet Censorship and Control. *IEEE Internet Computing*, 17(3), 6-9. http://dx.doi.org/10.1109/mic.2013.51
- O'Connell, M. (1999). Is Irish public opinion towards crime distorted by media bias? European Journal of Communication, 14(2), 191-212.
- Pierucci, A. (2003). O desencantamento do mundo: todos os passos do conceito em Max Weber. São Paulo: Editora 34.
- Puyosa, I. (2015). Control politico de internet en el contexto de un régimen híbrido. Venezuela 2007-2015. *Teknokultura*, 12(3), 501-526. http://dx.doi.org/10.5209/rev\_tk.2015.v12.n3.50392.
- Schreier, M. (2014). Qualitative Content Analysis? En U. Flick (eds.) The Sage Handbook of Qualitative Data Analysis. London: Sage.
- Silverstone, R. (2005). Por que estudar a mídia? (2ª ed). São Paulo: Edições Loyola.



www.retos.ups.edu.ed

# Level of use of social networks in the communication process in the micro and small sized enterprises of Cuenca

# Nivel de Uso de las redes sociales en el proceso de comunicación en las MIPES de Cuenca

Efrén Aucay Piedra is a commercial engineer from the Salesian Polytechnic University (Ecuador) (iaucay@est. ups.edu.ec) (http://orcid.org/0000-0003-3617-5235)

Priscilla Herrera Torres is a professor/researcher at the Salesian Polytechnic University (Ecuador) (dherrerat@ ups.edu.ec) (http://orcid.org/0000-0002-0693-2621)

#### Abstract

The research was carried out in Cuenca, the third most important city of Ecuador, Its main objective is to analyze the level of use, the administration of social networks and mobile applications, in the communication and marketing processes in Micro and Small sized enterprises (MIPES). Due to the globalization of the Internet, it has meant that companies have to adapt to increasingly complex and competitive environments, creating value strategies to meet a new style of demanders, influenced by publications in different virtual media. Consumers are increasingly informed, and it has repercussions in a more demanding society of comfort. It is a quantitative research, and the sample was taken from the Micro and Small enterprises of the city. For the collection of information, a survey was implemented. Then, an instrument was applied to selected establishments. The measurement constructs were validated using the Cronbach's alpha. The results show a low level of adoption of social networks in the microenterprise and a medium level in the small company. Additionally, it has been observed that establishments that use social networks and mobile applications for communication and marketing activities, it is not fully exploited, due to many factors such as: the lack of knowledge about the use and administration of social networks, it is deemed necessary, and the lack of trust and credibility among others.

#### Resumen

La investigación se desarrolló en Cuenca, tercera ciudad más importante del Ecuador, cuyo objetivo principal se enfocó en analizar el nivel de uso, así como la administración de redes sociales y aplicaciones móviles en los procesos de comunicación y mercadotecnia en las Micro y Pequeñas Empresas (MIPES). Debido a que la globalización del internet ha hecho que las empresas deban adaptarse a entornos cada vez más complejos y competitivos, creando estrategias de valor para llegar a satisfacer a un nuevo estilo de demandantes, que influenciados por publicaciones en diferentes medios virtuales, están cada vez más informados, lo que repercute en una sociedad más exigente de confort. La investigación es de tipo cuantitativa, la muestra se tomó de las Micro y Pequeñas empresas de la ciudad. Para la recolección de información se implementó una encuesta, instrumento que fue aplicado a los establecimientos seleccionados. Los constructos de medición se validaron mediante el uso del alfa de Cronbach. Los resultados obtenidos demuestran un bajo nível de adopción de redes sociales en la microempresa y un nível medio en la pequeña empresa. Adicionalmente, se observa que en los establecimientos que utilizan las redes sociales y las aplicaciones móviles para actividades de comunicación y mercadotecnia, éstas no se explotan en su totalidad por múltiples factores como: desconocimiento en el uso y administración, no lo consideran necesario, falta de confianza y credibilidad entre otros aspectos.

#### Keywords | Palabras clave

Social networks, mobile apps, communication, marketing, micro and small sized enterprises. Redes sociales, aplicaciones móviles, comunicación, marketing, microempresas y pequeña empresas.

#### 1. Introduction

The companies of the 21st century continue to be transformed by the globalization of the internet and the rapid growth of social networks and mobile applications, a fact that has caused changes in the internal and external domains of companies, which must adapt to environments that are increasingly more complex and competitive, where managers must possess the skill and expertise to create value strategies and to meet a new style of demanders, who are influenced by the publications presented through the different virtual media, are increasingly informed; which has repercussions in a more demanding society of comfort. Social networks and mobile applications have come to stay and become a key ally for business management in the fields of communication and marketing. For this reason, the role of social networks and mobile applications, used in communication and marketing activities in the city of Cuenca, in areas of coverage, level of use, administration and aspects of perception deserves be investigated.

# 1.1. Micro and Small Enterprises (MIPES)

Micro and small enterprises (MIPES) are establishments that have certain characteristics in common at a world level, but there are some particularities in each territory. As quoted in Tobar (2015, p. 81) "The European Union classifies as micro-enterprise any economic unit with less than ten workers, as well as those with annual sales of less than two million euros." In Chile, according to Dini and Stumpo, those productive units that occupy between 1 and 4 people are "micro-enterprises" and as small companies those that occupy between 5 and 49 people (2002, p.10).

In Ecuador, according to the directory of companies and establishments (INEC, 2014), MIPES are classified by the employed workforce and annual income level, denominating as microenterprises those establishments that have 1 to 9 employees and annual sales of less than or equal to to \$ 100,000. As for small businesses, having 10 to 49 employees and annual sales revenue of \$ 100,001 to 1'000,000. On the other hand, the nature and rationale of MIPES is simple and autonomous, according to Anzola, because of "the need for people to be independent in the labor and economic aspects" (2010a, p.14).

In this sense, the MIPES since its inception have been created and managed mostly by their owners, innovative and creative

people who contribute to economic growth and the development of peoples, becoming the most representative businesses in Latin America. According to Anzola (op cit) "small business together with microenterprise represent 95% of businesses in Latin America" (2010b, p.17). However, the globalization of the internet has become a challenge for some establishments. According to Liberona and Ruiz (2013, p.152) "an increasingly complex network of knowledge relations is being developed within and outside organizational boundaries." However, according to Muñiz and O'Guinn as quoted in Casaló, Flavián & Guinalíu (2012, p. 43), "internet has allowed the constant evolution of social networks thanks to the possibility offered by these channels to unite individuals who are geographically dispersed but who have a common interest."

The Internet and mobile telephony have allowed the emergence and proliferation of social networks and mobile applications, which are available to individuals and businesses; media that serve to manage relations with all involved in some subject of common interest, which according to Mitchell as quoted in Lozares (s/f, p.108) "can be defined as a well-defined set of actors - individuals, groups, organizations, communities, global societies, etc. - linked to one another through a relationship or a set of social relations. "In this sense, social networks allow us to be six steps from interacting with people at a global level, following Gonzalez (2014, p.279) who states that "we are all connected with any other person on the planet through a chain of acquaintances, who has no more than five intermediaries."

According to Richard and Chandra, as in Bigné, Küster and Hernández (2013, pp. 9-10), social networks and mobile applications regarding communication have:

(...) brought about profound changes in the way companies contact their customers, enabling, on the one hand, selective communication and a more active position of the receiver giving the consumer greater power over the communication process compared to the traditional media and, on the other hand, by facilitating the way in which consumers and users relate to each other.

In this sense, social networks and mobile applications in companies are "trying to be another contact with those who frequently maintain a relationship, thus allowing this two-way communication" (Romero, Alarcón and Gómez, 2011, p.201). According to Barker, Barker, Bormann and Niher, the services of social networks and mobile applications in the field of communication simplify the information exchange process (2015, p.178). The same ones that are necessary for an effective communication, which according to Garrido the company in these times "requires an efficient, cost-effective communication management without details left to chance" (2004, p.22). In the same vein Lam, Hair and McDaniel explain that "companies are interested in online communication because it enjoys enormous popularity" (2014, p.308). However, "MIPES have many problems managing the scarce communication resources they have for their companies, either because they spend on campaigns that are not appropriate or because they are not always directed at the appropriate public, wasting time and money" (Hoyos and Lasso, 2017, p.67).

In the field of marketing, social networks are presented as a fundamental pillar to provide information on advertising and promotional campaigns. According to Barker (2015) in his same publication he says that social networks can be an alternative to locate potential customers and get some promotion. These media facilitate social marketing, according to Laudon and Guercio "Social marketing involves the use of social networks and online communities to build brands and increase sales revenues" (2014, p.175).

In the same context, the term mobile marketing appears which consists of:

(...) the use of smartphones, which have not only changed our lives, but also the contact with technology, but also the way we consume content and access information. In this way a new form of understanding marketing has emerged, based on the use of mobile phones to transmit messages, services and promotional ideas... despite being a young discipline, it differs from traditional marketing in having a greater variety of means or tools to reach users (Estrade et al., 2013, p.37).

However, there are difficulties in measuring marketing activities directed through digital social networks (DSNs), according to Clemons as cited in Uribe, Rialp and Llonch (2013, p.208). "There is a consensus among marketing professionals in that there is a complex problem in measuring and monetizing marketing activities in DSNs."

Social networks and mobile applications are rapidly becoming a tool for sharing ideas among all stakeholders in the corporate sphere; in addition "is an important competitive advantage not only in terms of new markets, but in terms of Know-How" (González, 2014, p.52). Thus, the use and management of social networks and mobile applications in companies starts with the high level of reception of these by society in general, growing steadily since 2005 (Barker, 2015), without any indication of decrease.

In this scenario the social networks for the company regarding the connectivity, according to Ureña and Valenzuela "represent potential repositories of information" (2011, p.131, 132). Given these circumstances, businesses are exposed to this new system of communication, according to Valls (2016, p.24), the company "requires new communication strategies that appreciate these social changes, adapt to the new environment and give more importance to communication ", although it is necessary to emphasize the different types of social networks that have the greatest impact on companies and society, which are illustrated in chart 1, including the criteria of some authors in this regard.

Chart 1. Types of social networks

Social Network	Type of social Network	In this regard, the authors state:
Facebook	General social network; Since they shelter all types of people and supports all kinds of content (Martos, 2010, p.73)	"Professional Facebook pages or fan pages allow companies and professio- nals to have a presence on Facebook that is visible, not only by Facebook users, but by any internet user" (Carba- llar, 2012, P.93)
YouTube	It is a social network of contents, where the main factor is the material that is shared in this network (Junta de Castile and León, 2012, p.8)	"Using YouTube in your company's social networking strategies allows you to differentiate yourself from your competition" (Mejía, 2013a, P.142)
Twitter	It is a social network with a free microblogging service that allows users to send and share short entries, called "tweets", no longer than 140 characters. (Medina and Montjoy, 2015, p.8)	"This social network has become a social medium of interest so that companies can communicate certain offers, resolve doubts" (Gómez & Suárez, 2012a, p.195)

Social Network	Type of social Network	In this regard, the authors state:
LinkedIn	It is a professional social network (Hütt, 2012, p.123)	LinkedIn, "has become a parti- cularly attractive medium for the inclusion of advertisements and advertising messages that can be targeted to a very well defined target audience." (Gómez & Suárez, 2012b, P.200)
Instagram	It is a social network based on the sharing of multimedia elements (Estrade, Soro & Hernández, 2013, p.131)	In Instagram, "The images to be shared can be modified through a series of filters that have been sophisticated throughout the successive versions of the program" (Mejía, 2013d, P.152)

In this context, it should be noted that Facebook in Ecuador "has an audience of 8'900.000 users, of which 1'400.000 are Facebook page administrators, many of which belong to brands, enterprises" (Formación gerencial, 2015)). On the other hand in relation to the mobile applications, Barker et al. (2015b, 263) state that "most people have mobile devices on hand, so they are connected to social networks 24 hours a day, seven days a week." In the words of Estrade et al. (2013, p. 129):

(...) social networks and state-of-the-art mobile devices have established an interesting symbiosis relationship. Some (social networks) have offered a way that allows people to communicate more effectively, to the point that sharing information with another person through your mobile can be a pleasant experience. The other mobile devices are the here and now the possibility of interacting with your virtual community.

The services offered both data and voice on the same device are also referred to. According to Laudon (2012, p.264):

Instant messaging is a type of chat service that allows participants to create their own private channels. The instant messaging system alerts the user whenever someone on your private list is online, so you can start a chat session with other individuals. Some of the instant messaging systems for consumers are Yahoo!, Messenger, Google Talk, Windows Live Messenger.

Native mobile apps for devices "must be downloaded from an app store (Apple App Store, Android Play, Windows Mobile Marketplace for Windows Phone, etc." (Estrade et al., 2013, p.92). In this context, and emphasizing the mobile devices in Ecuador, according to Espinoza as cited in Rosero & Montalvo (2015), one of the markets that grows dynamically are those of smartphones, which until October 2014 exceeded 18 million in sales, where 3 out of 5 are smartphones. According to these approaches, social networks and mobile applications are increasingly broad and versatile, the same that are available to all types of companies, regardless of the economic sector and industry to which it belongs.

Thus, in the company, "existing knowledge has to be applied and the new knowledge must be generated to meet the needs of internal and external clients" (Jiménez, 2011, p.175). Social networks and mobile applications are a key ally, as well as a window into efficiency. If management efforts are targeted at the right audience and at the right time, it can be possible to place MIPES in a better competitive position in the marketplace. According to Moyano, Bruque & Eisenberg (2007, p. 162) "organizations should consider social networks as another business asset, or as a human capital dimension that deserves attention."

Finally, it is necessary to refer to the number of MIPES in Ecuador. According to the directory of companies and establishments (INEC, 2014), the country registers 843,644 companies, of which 97% of establishments are within the MIPES categories. According to this information, 57% of companies are concentrated in the four most populated provinces of Ecuador, namely: 23% of establishments in the province of Pichincha, Guayas 19%, Manabi 8,3% and in the province of Azuay 5.8%.

In the city of Cuenca, capital of the province of Azuay and third largest city in the country - object of this analysis - is where the research is focused, according to information provided by the Ministry of Industry and Productivity (MIPRO). 96% of establishments are categorized as MIPES.

Based on this information it is shown that they are highly representative businesses of the city mentioned above. However, according to Elizalde and Morocho (2014, p. 45), "MIPES of Cuenca do not give sufficient value and importance to social networks, either because they do not know how to use them or because of their lack of confidence in their effectiveness."

According to these approaches, the study variables are formulated, starting with examining the current situation of the companies in relation to: i) level of use; (ii) management; iii) knowledge to manage social networks and mobile applications focused on communication and marketing. Likewise, the present research seeks to determine the level of presence of social networks in communication, promotion and advertisement strategies.

# 2. Methodology

This research has a quantitative approach. The population included for the study was the MIPES of the city of Cuenca (Ecuador). For this purpose a survey was implemented with 28 questions, the same one that was directed to the managers of the ICT, or the people responsible for the marketing communication of the MIPES.

This instrument was used to obtain the information of 133 Microenterprises and 42 Small companies. The research covers all areas of economics of the MIPES, through a stratification at convenience.

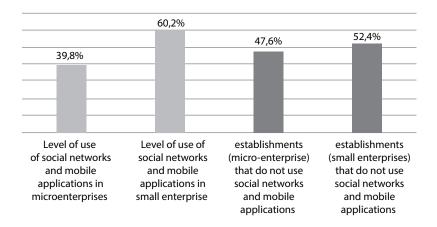
In order to determine the sample size, it was calculated with a 95% confidence level for the two categories of company and a margin of error of +/- 5% for Microenterprise and +/- 6% for Small Enterprises. The statistical software IBM SPSS® (Statistical Package for the Social Sciences) was used for data processing. The analysis of the results has a descriptive basis; while the measurement constructs are validated using the resulting Cronbach's alpha of 0.730. Following Peterson as quoted in Uribe, Rialp & Llonch (2013, p.215) "a value less than 0.7 shows a low internal consistency of the scale" so the obtained results are satisfactory.

To determine the level of use an ordinal scale was made and of intervals that, according to Romero, Rébori and Camino in the "ordinal" scale, the notion of order is added (the categories have an order that leads to the possibility of ordering the data) and in the interval, the possibility of quantifying distances between different categories or values of the variable "(2010, p.19) is added. In accordance with this approach, five levels of use were determined; was assigned a level of 0 to 20 as very low, from 21 to 40 low level, from 41 to 60 as average level, from 61 to 80 high level and from 81 to 100 as a very high level.

#### 3. Results

The results of the investigation, once the respective process for obtaining information have been carried out, are presented in two parts. The first, corresponding to micro-enterprises and the second, a comparison between micro and small enterprises. Figure 1 below shows the results of the level of use of social networks and mobile applications in micro-enterprises compared to small enterprises.

Figure 1. Level of use of social networks and mobile applications



# 3.1. Study of microenterprises

# Coverage

In Microenterprises, 83% of these establishments have internet access, of which 70% point out that the quality of internet service is between good and very good. The connection to the network is more popular through laptops and smartphones. In Microenterprise, only 39.8% have a corporate account in social networks, in the following figure (2) you can see the different social networks used, leading Facebook with a large majority of 58%.

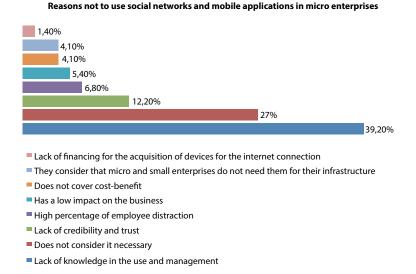
58,0%

■ FACEBOOK
■ WHATSAPP
■ YOUTUBE
■ INSTAGRAM
□ TWITTER
□ MESSENGER
□ SKYPE
□ LINKEDIN

Figure 2. Social networks and mobile applications

60.2% of establishments do not use social networks. After assessing the reasons given, the following aspects have been typified as shown in figure 3, showing that the main reasons are: a) Lack of knowledge in the use and administration, b) Does not consider it necessary, c) Lack of trust and credibility.

Figure 3. Micro-enterprises and social networks



# Use and management

The results provided in this area are those establishments that make use of social networks through one or more corporate accounts. In accordance with this, it is shown that 97% of these establishments use social networks on a daily basis for communication activities. 37% publish and promote monthly in these media, while other establishments do so on different dates and times of the year.

For the management of these activities, 38% of these establishments are connected to these networks more than three hours a day, 30% are between 1 and 3 hours a day and others consider less than one hour a day. In this sense, users mostly expressed a level of trust and credibility between medium and high in social networks for communication and marketing activities; the same ones that are used for the achievement of the different organizational purposes. This is illustrated in Chart 2, which illustrates the relationship between the use and the goals that organizations seek through social networks.

Chart 2. Social networks and mobile applications

Level of distribution of social networks and mobile applications according to business objectives					
Pı	rovide information		Improve	the image of the	company
f	Facebook	74%	f	Facebook	64%
<b>y</b>	Twitter	11%	<b>y</b>	Twitter	20%
O	Instagram	9%	O	Instagram	16%
	WhatsApp	4%	Promotions and advertising actions		
	Messenger	4%	f	Facebook	90%
Communication with all stakeholders			O	Instagram	10%
WhatsApp 81% Post-sale follow up					

f	Facebook	11%	f	Facebook	55%
	Messenger	6%		WhatsApp	39%
8	Skype	2%		Messenger	6%

As shown in chart 2, it is stressed that there are other objectives of use such as: i) observe the competition; (ii) training; iii) attracting talents; iv) gather opinions and suggestions; however for these purposes, social networks and mobile applications are used to a lesser extent. In this same section it is necessary to reiterate that 83% of the establishments state as indispensable the use of the chat to send files, both data and voice, an activity that is done with all stakeholders, highlighting the interaction with the customer (CRM).

With the interest of knowing the effectiveness of communication and marketing through social networks, a comparison was made with conventional media, where 79% of establishments that use social networks and mobile applications stated that communication actions are more effective in these media, while for marketing actions, 73% of respondents affirm that social networks are effective for this activity; the proportional difference to each action respectively indicated that the conventional means for these actions (communication and marketing) are effective.

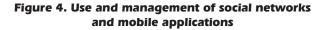
On the other hand, 49% of managers or owners carry out an analysis prior to the implementation of social networks, with the aim of identifying the risks and benefits provided by these media for establishments, 45% have a community manager, who manages the material directed to the network. For this purpose only 21% have a continuous training plan for the human talent of this area.

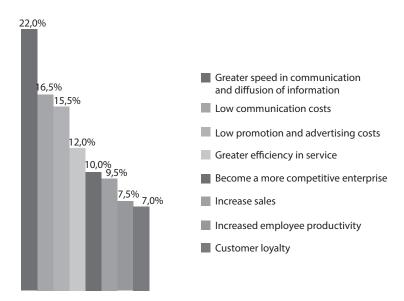
In this scenario, 40% of establishments keep track of the impact such as statistics, likes counts, comments management of activities carried out on the network, 36% use Fanpage for marketing actions and 40% measures the return on investment of the advertising actions carried out in social networks.

In terms of prevention, only 11% have a manual or plan to avoid information leakage through these means, therefore there is a rather

obvious weakness in prevention issues. On the other hand, in perception aspects, 93% think that they can reach the final consumer directly with their products/services and 32% think that they can appear in online stores with the help of social networks.

In this section Micro-enterprises reveal the advantages obtained by the use and management of social networks and mobile applications in business management in the field of communication and marketing, the same that are observed in figure 4, highlighting the speed in communication and dissemination of information in 22%.





In this same aspect, the information obtained through these media is ensured to be useful for making decisions, the same that contribute to improve aspects that lack effective management or situations that from the point of view of the client fail to meet expectations.

51% say that the networks help improve the service, 31% believe that the corporate image improves and the rest (18%) improves the product. Likewise, respondents consider that as advantages are obtained by the use and management of social networks and mobile applications,

there are also disadvantages: 55% of the owners of establishments that make use of these means show that it is the distraction of the collaborators, a 26% think that it inspires distrust to the client, while the rest say that they do not trust these platforms.

# 3.2. Microenterprise vs Small Enterprise

The Small Enterprise has close similarities with Microenterprise in the use of social networks and mobile applications in the fields of communication and marketing, noting that the size of establishments does not influence in greater proportion in these areas of research; except in some specific aspects, but in none of the areas is more than 10%. These differences existing in the areas of coverage, use and management.

- In the coverage area, 9.9% more establishments in the small business have internet access in relation to the microenterprise. The reception by the social networks, is greater in 7.8% in correspondence with the microenterprise. However there is a low level in microenterprise and a medium in small business in social networking adoption.
- Regarding use, we see in small enterprises a decrease of 7.5% in the daily use of social networks and mobile applications for communication activities. However, management is greater in small business. One of the reasons is that there is more human talent hired for this area. In relation to Microenterprise differ by 10 percentage points, which has a slight increase in the management of these media, reflecting a better management of tools and pages like Fanpages. There is also a slight increase in the handling of statistical analysis, monitoring and management of comments by communication and marketing actions carried out in social networks.

#### 4. Conclusions

Microenterprise and Small Enterprise (MIPES) in Cuenca, although they are representative businesses in the city, about 90% of these establishments have access to the Internet and technological devices for their operations. However, according to the obtained results, the level of adoption of social networks according to the established scale is low for microenterprise and medium for small enterprises. The main reasons

why the establishments do not use these platforms is: a) Lack of knowledge in the use and management, b) They do not consider it necessary, and c) Lack of trust and credibility among other aspects considered in a smaller proportion.

Establishments that make use of social networks and mobile applications have achieved, in general terms, the relationship between the use and proposed objectives such as: communication, advertising, promotion, improvement of the company image, among other purposes; can be achieved by organizations, highlighting benefits such as: Greater speed in communication and dissemination of information, greater efficiency in service, lower costs in communication, promotion and advertising. As far as advertisement actions are concerned, 73% of these establishments indicate that social networks are effective for these purposes. In addition, in this respect, 90% of these activities are shown on Facebook, a leading social network at the local, national and international levels. However, it can be concluded in this research that social networks are not exploited to their full potential by establishments that use them, because only 40% of these establishments carry out impact monitoring such as statistics, management and monitoring of comments, among other activities of auditing and analysis of social networks. As future lines of research it is recommended to propose a new study of internal marketing communication, a topic that would contribute to make a comparative analysis between the two aspects.

#### References

Alcazar, J. (01 de febreo de 2016). Estadísticas Facebook Ecuador. Available in Formacón Gerencial: (https://goo.gl/gszxXN)

Anzola, S. (2010). Administración de pequeñas empresas. México: McGraw-Hill/Interamerivada.

Barker, M., Barker, D., Nicholas, B., & Niher., K. (2015). *Marketing para medios sociales*. Mexico: Cengage learning.

Bigné, E., Küster, I., & Hernández, A. (2013). Las redes sociales virtuales y las marcas: Influencia del intercambiode experiencias eC2C sobre la actitud de los usuarios hacia la marca[The social networks sites and the brands. Influence of eC2C exchange experience on brand users' Attitudes. *Revista Española de investigación En Marketing ESIC*, 17(2). 7-27. doi:https://doi.org/10.1016/S1138-1442(14)60022-X.

Carballar, J. (2012). Social Media marketing personal y profectional. Mexico: Alfaomega.

- Casaló, L., Flavián, C., & Guinalíu, M. (2012). Redes sociales virtuales desarrolladas por organizaciones empresariales: antecedentes de la intención de participación del consumidor[Firm-hosted online social networks: Antecedents of consumer intention to participate]. Cuadernos de Economía y Dirección de la Empresa, 15(1). 42-51. (http://bibliotecavirtual.ups.edu.ec:2353/10.1016/j. cede.2011.06.003).
- Elizalde, M., & Morocho, M. (2014). Análisis para la elaboración de una guia para el manejo estrátegico de Facebook y Twitter para la pequeña empresa cuencana. (tesis de pregrado). Universidad Del Azuay, Cuenca, Ecuador.
- Estrade, J., Soro, D., & Hernández, Á. (2013). Marketing Digital. Madrid: Ediciones Anaya.
- Garrido, F. (2004). Comunicación Estrategica. España: Ediciones Gestión 2000.
- Gómez, Á., & Suárez, C. (2012). sistemas de información. Madrid: RA-MA Editorial.
- González, Ó. (2014). Comercio Electrónico 2.0. Madrid: Ediciones Anaya.
- Hoyos, A., & Lasso, M. (2017). Pymes como modelo económico en la creación de estrategias de comunicación [MIPES as an economic model in the creation of communication strategies]. *Retos*, 7(13), 59-74. doi:http://dx.doi.org/10.17163/ret. n13.2017.04.
- Hütt Herrera, H. (2012). Las redes sociales: una nueva herramienta de difusión. *Reflexiones*, 91(2),121-128. (https://goo.gl/Ofx03c).
- INEC. (2014). Directorio de empresas y establecimientos. Available in (https://goo.gl/n4HIIC)
- Jiménez, M. (2011). La gestion Informatica de la empresa. Madrid: RA-MA Editorial.
- Lamb, C., Hair, J., & McDaniel, C. (2014). MKTG Marketing. méxico: Cengage Learning. Laudon, J., & Laudon, K. y. (2012). Sistemas de Información Gerencial. México: Pearson Educación.
- Laudon, K. C., & Traver, C. G. (2014). E-comerce 2013. Mexico: Pearson Educación. León, J. d. (2012). Guia de usos y estilos en las redes sociales. Available in (https://goo.gl/utP6Ld)
- Liberona, D., & Ruiz, M. (21 de 09 de 2013). Sience Direct. Available in (http://bibliotecavirtual.ups.edu.ec:2229/science/article/pii/S0123592313000041)
- Lozares, C. (1996). La teoria de redes sociales. *Universitat Authnoma de Barcelona*. Departament de Sociologia., (48).103-126.(file:///C:/Users/usuario/Downloads/25386-58835-1-PB%20(2).pdf).
- Martos, A. (2010). Redes Sociales. Madrid: Ediciones Anaya.
- Medina, A., & Montjoy, R. (2015). El marketing directo en las redes sociales y su influencia en el campo empresarial. (Tesis de pregrado). Universidad Técnica de Machala, Machala, Ecuador.
- Mejía, J. (2013). La Guía del Community Manager. Madrid: Ediciones Anaya.
- Moyano, J., Bruque, S., & Eisenberg, J. (2007). La influencia de las redes socialesen la adaptación de los trabajadores en el cambio tecnólogico. *Cuademos de Econom-fa y Dirección de la Empresa*, (31). 147-170. (http://bibliotecavirtual.ups.edu. ec:2211/ehost/pdfviewer/pdfviewer?sid=b8955c12-5861-4575-91a9-8e3c5c-44858f%40sessionmgr4010&vid=4&hid=4106).

- Romero, C., Alrcón, M., & Gómez, M. (2011). Adopción de redes sociales virtuales: ampliación del modelo de aceptación tecnológica integrando confianza y riesgo percibido[Adoption of social networking sites: extending the technology acceptance model integrating trust and perceived risk]. Cuadernos de Economía y Dirección de la Empresa, 14(3). 194-205. (http://bibliotecavirtual.ups.edu. ec:2353/10.1016/j.cede.2010.12.003).
- Romero, M., Rébori, A., & Camino, M. (2010). Un índice para "medir" el nivel de innovación tecnologica en las empresas. RAI (Revista de Administração e Inovação), 7(1).3-20. (https://goo.gl/OCDoim).
- Rosero, C., & Montalvo, H. (2015). La disonancia cognitiva como factor motivador en las decisiones del consumidor: caso Smartphone [The cognitive dissonance as a motivating factor in consumer decisions: smartphones case. *Retos*, 5(10), 177-192. doi: http://dx.doi.org/10.17163/ret.n10.
- Stumpo, M. D. (2002). Analisís de la política de fomento a las pequeñas y medianas empresas en Chile. Santiago de Chile: Impreso en Naciones Unidas, Santiago De Chile.
- Tobar, L. (2015). Análisis competitivo de las pequeñas y medianas empresas en Cuenca Ecuador [Competitive analysis of small and medium enterprises in Cuenca, Ecuador]. *Revista Internacional Administración & Finanzas*, 8(3), 79-92.(https://goo.gl/MPS80p).
- Ureña, G., & Valenzuela, J. (2011). Contactos de redes sociales en línea como repositorios de información. RUSC, 8(1). 128-141. (https://search.proquest.com/docview/1018856266?accountid=32861).
- Uribe, F., Rialp, J., & Llonch, J. (2013). El uso de las redes sociales digitales como herramienta de marketing en el desempeño empresarial. *Universitat Autònoma de Barcelona*, 205-231. (http://bibliotecavirtual.ups.edu.ec:2211/ehost/pdfviewer/pdfviewer?vid=4&sid=0faeb380-aceb-4fb9-86c7-03f2c09af16d%40sessionmgr4009&hid=4101).
- Valls, M. (2016). Redes Sociales herramienta de gestión empresarial. Buenos Aires: Ugerman editor.

www.retos.ups.edu.ec

# The Investment in advertising and its effect on the Medium Enterprises of Guayaquil

# La Inversión en publicidad y su efecto en las Medianas Empresas de Guayaquil

**Catalina Falquez Arce** es profesora/investigadora de la carrera de ingeniería en marketing y negociación comercial de la Universidad de Guayaquil (Ecuador) (catalina.falqueza@ug.edu.ec) (http://orcid.org/0000-0003-0954-3290)

**Blanca Silva Guerrero** es profesora/investigadora de la carrera de ingeniería en marketing y negociación comercial de la Universidad de Guayaquil (Ecuador) (blanca.silvag@ug.edu.ec) (http://orcid.org/orcid.org/0000-0003-4140-4856)

Vanessa Rojas Herrera es funcionaria de auditoría tributaria en el Servicio de Rentas Internas (Ecuador) (vcro-jas@sri.qob.ec) (http://orcid.org/0000-0002-0654-1110)

#### Abstract

The Analysis of alternatives to improve sales in medium-sized companies may present the dilemma about how effective it will be to invest in Advertising; Although referents of the application of marketing strategies confirm the effects of information, persuasion and recall obtained by advertising, the current economic and social contexts demand better arguments of support. Therefore, and despite the fact that there may be a number of variables related to other marketing, administrative, or financial components; the study sought to determine the effect of advertising in relation to sales of midsize companies in Guayaquil in 2015, using the linear regression model, achieving determining the elasticity of the In dependent variable sales over the independent variable In Advertising Expenses is 3.21, concluding that sales are influenced by changes in advertising expenses, corroborating the affirmations established in the different theoretical references, the importance of an effective advertising campaign and the need to start measuring it as an investment And not as an expense.

#### Resumen

El análisis de las alternativas para mejorar las ventas en las medianas empresas puede presentar el dilema sobre qué tan efectivo será invertir en publicidad. Si bien es cierto que referentes de la aplicación de estrategias de mercadotecnia confirman los efectos de información, persuasión y recordación que obtiene la publicidad, los actuales contextos económicos y sociales exigen mejores argumentos de apoyo. Por lo tanto, y a pesar de que pueden presentarse un sinnúmero de variables relacionadas a otros componentes del marketing, de gestión administrativa, o financiera; el presente estudio procuró determinar el efecto de la publicidad con relación a las ventas de las medianas empresas de Guayaquil en el año 2015, aplicando el modelo de regresión lineal. Como principales resultados se logra determinar que la elasticidad de la variable dependiente «In Ventas» respecto de la variable independiente «In Gastos» de Publicidad e de 3.21, concluyendo que las ventas son influenciadas por los cambios en los gastos de publicidad, corroborando las afirmaciones establecidas desde los diferentes referentes teóricos sobre la importancia de una campaña publicitaria efectiva y la necesidad de empezar a medirla como inversión y no como un gasto.

#### Keywords | Palabras clave

Marketing, Business, Sales, Advertising, Expenses, Investment Mercadotecnia, Empresas, Ventas, Gastos, Publicidad, Inversión.

### 1.Introduction

One of the challenges for entrepreneurs is to achieve sustainable results over time that will allow them to maintain the principle of «business running». Some studies in this regard affirm that for this to happen the company must be market oriented by gaining competitive advantage, emphasizing on the continuous generation of value for the buyer and trying to ensure its survival in the medium and long term (Álvarez, Santos and Vázquez, 2001, Kohli and Jaworski, 1990, Narver and Slater, 1990). Often small and medium-sized enterprises (SMEs) are found that because of lack of knowledge or lack of budget are still caught in passive approaches, that is, focused on producing or marketing products and that when trying to sell them have no loyal customers, since the products or services do not meet their expectations. Investors in these companies have to make a change of approach, involving active marketing in their strategies. Analyzing some postulates about marketing can be concluded that it is clear that organizations must pay attention to the mechanisms necessary to capture value from and for their customers, endorsing Marketing as an exchange of value between individuals and organizations in order to achieve what they need and thus meet their needs (Armstrong & Kotler, 2013). It is interesting to note how in the new orientations the importance of creating and maintaining relationships with customers is already beginning to be emphasized in companies, because not only must be limited to the application of a «marketing plan», but must be known manage the relations of exchange with its clients after having applied the strategies of Marketing Mix.

Rojas (2016) affirms that in addition in the new currents importance is given to the technology boom and how the company must face the new way of attracting customers and surviving the collaborative and digital economy. For its part Kotler et al. (2002, pp. 48-51) includes the latest marketing concepts defined by AMA (2004) as a set of processes that identify, create and distribute value to develop satisfactory and long-term relationships that contribute to corporate profits.

Therefore, not only entrepreneurs, but marketers, must recognize the importance of financial decision-making, creating a security context that will support the implementation of successful marketing strategies. (Dominguez Doncel & Muñoz Vera, 2010).

Monferrer (2013) states that it is significant that communication acts on current and potential customers; hence the importance of advertising as a mechanism to publicize these products to consumers who are demanding them. According to Rojas (2016) citing Talaya et al. (2008), advertising is defined as a communication process that is made by the issuer (seller) to a group of recipients (actual or potential consumers), with the aim of publicizing the value benefits of their products or services, persuading them for their purchase.

For Kotler (2001) one of the most complex decisions in marketing is the budgeting of advertising and promotion because they must be effective when allocating budget to the promotion of sales, advertising, public relations, direct marketing and strength sales, as it is needed. There are some forms that companies use to allocate resources to this item, one of the most used being the setting of goals based on the percentage of sale. However, for the author (op. Cit.), the most beneficial method is that of «objective and task», since it needs to first set the objectives of advertising and then define the costs of each activity that will be required.

It is also important to take into consideration the strategy that will be proposed to achieve the objectives defined in advertising budgets. In this sense Kotler (2001) details four factors that should be taken into account when making the advertising budget: i) the life cycle of the product; (ii) market share; (iii) competition and; iv) the possibility of substitution of the product.

According to Rojas (2016), promotional and advertising budgets can be costly for companies, especially for Small and Medium Enterprises (SMEs). Due to this, at the moment of the decision making regarding the investment in resources that generate income, it is precisely the advertising one of the items that originates certain doubts. For this reason it is common practice to relieve the expenses for communication and marketing to aspects such as human talent or production, as the influence or not of advertising in the results of the company is not clearly determined.

In the present research work, it was not projected to evaluate how the medium-sized companies established advertising and promotion budgets, or if the methods used were the ideal ones, but rather to analyze how promotion and publicity expenses reflected in their income statements caused an increase in sales. However, considering that every entrepreneur seeks to maximize the profits of the company, it is important to know if their resources are being invested efficiently. Therefore, an attempt is made to evaluate the effect of the investment of advertising on sales results, taking as a sample frame the medium-sized enterprises of Guayaquil (Guayas, Ecuador) during the year 2015¬.

# 2. Methodology

According to Hernández-Sampieri (2006), the collection of information is the way of collecting data on variables of what is analyzed. This research uses a quantitative approach, because, as mentioned by the authors mentioned above, it is necessary to collect data in order to be able to prove with statistical analysis, in this specific case, the effect of the investment of advertising on the sales of the medium-sized companies in Guayaquil. The deductive method was used, because it begins by examining studies, theories, analyzes and writings carried out worldwide on the impact of advertising investment on corporate income. The type of research is causal, while the design is quantitative.

# 2.1. Population and sample

The study subjects are the medium-sized companies in Guayaquil. To reach the sample, several discard criteria were followed, analyzing the company base published by the Superintendency of Companies of Ecuador. Part of the definition of Small and Medium Enterprises typified in the Organic Code of Production, Trade and Investment. According to the report of the Superintendency of Companies, it is established that the companies are classified by their size in Micro, Small, Medium and Large. In order to obtain a selected database, information from the Internal Revenue Service was used. According to the data corresponding to this base, the universe is established in 46,893 active and manageable companies, registered in the Single Registry of Contributors of Zone 8 (constituted by the cantons of Guayaquil, Samborondón and Durán). Based on this data set, in order to constitute the sample of the medium-sized companies of the city of Guayaguil, the discard of 6,545 companies that were supervised by other organisms other than the Superintendency of Companies was carried out.

After the first discard, 40,348 companies controlled by the Superintendency of Companies remained; of them 3,280 were discarded for belonging to the cantons of Samborondón and Daule, being, by differentiation, 37,068 companies of the city of Guayaquil. Subsequently the data was sorted by branches or sectors of the economy based on the ISIC¹ code. Based on this judgment, 6,283 companies are excluded from the database, which are responsible for 12 sectors of activities with low commercial representation and which may distort the results of the analysis. Therefore, 30,785 companies remained.

Then, based on the criteria of companies that submitted their income tax return for the year 2015, 20,438 were selected, since it is understood that they are companies with current commercial activity. Of that group, the companies whose total income expressed in the Income Tax statement fluctuated between USD 1,000,001.00 and USD 5,000,000.00, which corresponds to the classification of medium-sized enterprises according to the Organic Code mentioned above were discarded. As a result of this fourth screening, 2,174 medium-sized companies from the city of Guayaquil were obtained, which correspond to the actual sample for the present study and which are presented by item, sales and advertising investment in Chart 1.

Chart 1. Extract of n Medium Enterprises of Guayaquil by Sector

SECTOR	NORDEN	TOTAL OF SALES	TOTAL ADVERTISING EXPENDITURE
Accommodation and food service activities.	49	98 518 570,35	837 028,60
Activities of human health care and social assistance.	59	128 739 490,20	389 772,18
Real estate activities.	73	128 236 236,21	1 137 099,18
Professional, scientific and technical activities.	159	321 740 118,79	6. 108 297,47
Agriculture, animal husbandry and fishing.	261	526 949 003,31	250 256,33
Wholesale and Retail; repair of motor vehicles and motorcycles.	976	2 160 955 593,12	11 661 466,14

<sup>1</sup> Systematic classification of all economic activities whose purpose is to establish harmonized codification at the global level.

SECTOR	NORDEN TOTAL OF SALES		TOTAL ADVERTISING EXPENDITURE
Construction	162	321 893 390,89	292 472,80
Manufacturing industries.	258	572 782 166,62	3 410 424,45
Other service activities.	32	54 780 740,13	281 633,86
Transport and storage.	145	294 650 992,24	484 525,29
Total USD (US\$)	2174	4 609 246 301,86	24 852 976,30

Source: Internal Revenue Service Note: \* Taken from Rojas (2016)

# 2.2. Hypothesis

This research tries as a starting hypothesis to determine if allocating advertising capital would increase the sales of the companies under analysis. A second hypothesis raises the question of whether sales are further increased by the influence of market share.

## 2.3. Variables

The study analyzes three variables: i) sales amount (dependent variable); ii) total advertising and promotional expenses (independent variable); (iii) market share (independent variable). The latter was considered because sales determine market share. This information corresponds to data from accounting items expressed in USD, whose information was acquired from secondary sources such as the database of the Superintendency of Companies and the Internal Revenue Service, as seen in the statements reported by the companies as results of the fiscal year. It should be noted that the study does not consider other variables that may also affect the company's results, such as discounts on sales and other promotions and direct or distribution sales strategies, since the central theme of the analysis is advertising and its importance as a tool of communication, persuasion and memorization of the message of sale.

# 2.4. Statistical analysis

According to Gujarati & Porter (2010), there are models that can be linear in the parameters. However, in the nonlinear variables they require a transformation of the variables to obtain a better interpretation of the results of the regression model. Thus, the present study uses

the Log-linear model, and as tool was used XLSTAT, with which this linear regression model was applied.

In order to apply the linear regression formulas, in the case of the dependent variable, data were taken from the revenues published by the internal revenue service that relate to its usual movements such as sales, amounting to USD 4,609,246,301, 86 in total declared sales (see Charts1 and 2). In the case of the independent variable "publicity expenses", the amounts declared in the tax services were chosen under the concept of "advertising and promotion costs and expenses", amounts that were incorporated in relation to the present analysis: USD 24,852,976, 30 (see chart 1).

For Gujarati & Porter (2010), using only two variables, dependent and explanatory, is not so real in practice. The situation is that on the variable "sales" there may be many variables that can affect it; therefore, in the present investigation another independent variable is included as is the "market share". To determine the value corresponding to this variable the information of the variable "sales" was used, explained in previous paragraphs; thus establishing the total value of operational sales of each economic sector. Subsequently, the percentage of sales of each Guayaquil medium-sized company was obtained, thus determining the market share corresponding to its sector, as shown in Chart 2.

Chart 2. Income Tax Declaration Year 2015- 2175
Medium-size Enterprises of Guayaquil

Medium-size Enterprises of Guayaquii					
CAS.	DESCRIPTION	VALUE USD			
6999	Total, of declared income	4.687.592.567,54			
Selected	cells corresponding to operating income:				
6001	Net local sales taxed at 12% VAT rate	2.380.221.449,47			
6005	Local services taxed with 12% VAT rate	655.389.176,26			
6002	Exempt value local net sales taxed with 12% VAT rate	49.193,47			
6003	Net local sales taxed at zero tariff or VAT exempt	976.711.407,17			
6007	Local services taxed at zero tariff or exempt from VAT	247.224.527,20			
6008	exempt local value of services services taxed at zero tariff or exempt from VAT	1.166.750,33			
6004	Exempt value local net sales taxed at zero rate or exempt from VAT	2.968.933,48			
6009	Net exports of goods	161.366.315,62			

CAS.	DESCRIPTION	VALUE USD
6011	Net exports of services	47.046.720,67
6012	Net exempt value of services	1.344.995,19
6010	Net exempt value of goods	11.833,68
6013	Income from construction services	103.532.370,96
6091	Other income from abroad	2.204.075,67
6015	Income earned under commissions or similar	13.890.740,35
6092	Exempt value other income from abroad	1.289.397,29
6017	Income from operating leases	14.828.415,05
Total sale	s base for the analysis	4.609.246.301,86

Source: Internal Revenue Service

# 2.5. Log-lineal model

Because the data on the variables «sales», «advertising expenditure» and «market share», are highly disaggregated; the variables were transformed to «ln», which will better express the model. After explaining the variables used in the multiple linear regression model, we try to point out the relationship of these variables and the effect of advertising investment on the sales horizon of Guayaquil's medium-sized companies, in percentage terms.

#### 3. Results

When the data referred to above is integrated in the XLSTAT statistical tool, the explanatory variable is the advertising and promotional expenditure expressed in «ln», and the variable response is the «ln Revenue from sales»; that is to say that the variable of «promotion and publicity» can manifest the level of sales of the medium-sized companies of Guayaquil. The data present a linear relationship directly proportional.

# 3.1. Descriptive Statistics

With a confidence interval of 95% and a tolerance level of 0.0001, the descriptive statistics of the studied variables are presented below:

Variable	Obser- vations	Obs. with lost data	Obs. without lost data	Mini- mum	Maxi- mum	Mean	Typical Dev.
In Sales	1093	0	1093	13,545	15,419	14,527	0,46
In Advertising Expenses	1093	0	1093	1,902	14,66	8,111	2,143
In market share	1093	0	1093	-7,806	-2,686	-5,997	1,131

Chart 3. Descriptive statistics of analyzed variables

The descriptive statistics of the variable «ln sales» show a standard deviation of 0.46, with a mean of 14,527 in a range between 12,545 and 15,419, while in the case of the variable «ln advertising expenditure» there is a typical deviation of 2.143. In addition, it is sought to determine if the coefficient  $R^2$  fits the linear regression profile to the data. Thus, the model establishes the degree of relationship of the variables, not a causal relationship.

Gujarati & Porter (2010) mention that there are many researchers trying to adjust their models to a coefficient close to 1 to demonstrate their effectiveness. However, the aforementioned authors mention that the researcher should focus more on the statistical results of the explanatory variables with respect to the dependent variable. In this way they conclude that the fact that the result of the coefficient of determination is far from 1 does not mean that the model is bad. Chart 4 presents the regression results of the variable «In sales» with goodness of fit, with the coefficient of determination R<sup>2</sup> being 12%.

**Chart 4. Linear Regression of Variables** 

Regression of the variable In VENTAS: Statisticians of goodness of fit (In sales):				
Observations	1093			
Sum of weights	1093			
GL	1090			
R <sup>2</sup>	0,124			
R²adjusted	0,122			

# 3.2 Variance analysis

It is possible to determine the variability of «In sales» by means of the information obtained from the analysis of variance of the two independent variables (Chart 5).

Chart 5. Analysis of Variance and Sum of Squares

Variance analysis (In sales):							
	L	Sum of median	Squares median		r>F		
Model		8,609	4,305	7,024	0,0001		
Error	090	02,429	,186				
Total corrected	092	31,039					
Calculated against mode	Y=Median(\	()					
Ar	nalysis Sum	of Squares T	ype I (In sale	s):			
Source	L	Sum of median	Squares median		r>F		
In Advertising expenses		,888,	,888,	1,706	0,0001		
In Market share		2,721	2,721	22,343	0,0001		
An	Analysis Sum of Squares Type III (In sales):						
Source	L	Sum of median	Squares median		r>F		
In Advertising expenses		,17	,17	7,841	0,0001		
In Market Share		2,721	2,721	22,343	0,0001		

Because the p-value (probability value) is greater than the F-statistic in the model and hence in the two independent variables, it can be interpreted that the information given by the independent variables «In advertising costs» and «market» significantly explains the variability of «In sales» as well as the influence of the «market share» variable.

# 3.3. Regression analysis

Finally, the elasticity of the dependent variable «In sales» is determined with respect to the independent variable «In advertising expenses».

Model parameters (Ln sales)								
Source	Value	Standard Error	Т	Pr> t	Lower Limit (95%)	Higher limit (95%)		
Interception	15,032	0,087	172,269	<0,0001	14,861	15,203		
In Advertising expenditure	0,032	0,006	5,276	<0,0001	0,02	0,044		
In Market share	0,128	0,012	11,061	<0,0001	0,105	0,15		

Chart 6. Regression analysis

Linear Regression (InSales) equation:

In SALES = 15,032 + 3,21 \* In Advertising Expenditure + 0,128 Market Share

As a result of the application, the elasticity of the dependent variable «In sales» with respect to the independent variable «In advertising costs» is 3.21, which indicates that if the other variables remain the same, a 1% increase in «In expenditure in advertising», corresponds to a 3.21% increase in «In sales», so it is evident with meridian clarity that in the case of analysis sales are directly impacted by changes in advertising expenses.

## 4. Discussion

The results of the present investigation demonstrate the importance that is being given to the investment variable in promotion and publicity, with respect to the variation in sales in a group of Medium Enterprises of the city of Guayaquil. It is significant to clarify that the investment in promotion and advertising reflected as an expense in a company's income statement is not the only variable that affects the variation in sales, as already mentioned in reference.

However, the study is consistent with the statements of other authors that show that sales and profits are directly related to advertising and that they are important variables to be able to evaluate if it is really being effective in advertising investment, the benefit being product of the unit margin for the units sold. However, for all companies, the same result does not emerge because it can vary for different reasons such as different costs, prices, among others (Tellis & Redondo, 2002).

Kotler (2001) affirms the importance of marketing and its strategies - among which is advertising -, as the company begins to give it

more force, its sales potential is approaching its potential market, establishing a direct relationship between the level of sales and the level of marketing, which is evident in the analysis carried out.

It should be mentioned other studies with similar results to the present one, considering the study carried out by Sellamen-Garzón & Arce-Meza, (2010) on the advertising decisions and their influence on the sales of the products in stores in Bogotá, who concluded that applying the linear regression method shows a direct relationship between the quantities demanded and the investment in advertising.

Tellis and Redondo (2002) point out that there is some research on the relationship between advertising and sales, which have provided good results on the effects of advertising, as well as certain field studies that have had as a result that if the advertising pressure is increased at 1%, a 0.01% increase in sales is going to be obtained.

#### 5. Conclusion

According to the multiple linear regression model applied in the present research work with the data of the medium-sized companies of the city of Guayaquil, it is concluded that the variables: a) sales, b) advertising expenditure and c) market share, are directly related, being the «sales» variable dependent on the explicative variables «advertising »and «market share».

It was also shown that as advertising expenditure increases, the level of sales increases, which corroborates the conclusions established in the different theoretical references mentioned in the present research work. Because many of the authors quoted above refer to Marketing from a theoretical perspective, they emphasize the importance of applying marketing strategies with the objective of satisfying the consumer, creating value-sharing relationships and, therefore, achieving the goals of companies, maximizing the profits of shareholders or investors.

It should be mentioned that the results of the investigation showed that the medium-sized companies in the city of Guayaquil are not allocating sufficient resources to the marketing item, which can be seen in the values indicated as advertising expenditure in tax returns to income, in which this declared budget line represents - on average - 0.54% with respect to operational revenues; an aspect that requires an analysis in later research.

The present research does not analyze the cause of advertising spending levels of each economic sector of the medium-sized companies, so it is advisable to carry out a study in the future of medium-sized companies from explicit sectors of the different regions of the country, in order to analyze its variation of investment in advertising and whether it has an effect on sales, even being able to design a more complete pattern with other independent variables. In addition, with the current tax reforms in Ecuador on the processes of deduction of advertising spending, another study in the future could be the analysis of the impact of this deduction on the decision-making processes of medium and large companies in this matter.

### 6. References

- AMA (2013). Definición de Marketing. Recuperado el 16 de Jullio de 2016, de https://www.ama.org
- Armstrong, G., & Kotler, P. (2013). Fundamentos del Marketing. México: Pearson Educación de México.
- Clow, K. E., & Baack, D. (2010). Publicidad, Promoción y Comunicación Integral en Marketing (4ª Ed). México: Pearson Educación.
- Dominguez-Doncel, A., & Muñoz-Vera, G. (2010). Métricas del Marketing (2ª Ed). Madrid: Esic Editorial.
- Garza-Castaño, R. (2000). Creación de PYMES: Objetivo emprendedor. *Ingenierias*, 54-58. Gujarati, D. N., & Porter, D. (2010). *Econometría* (5ª Ed). México: McGraw-Hill/Interamericana Editores.
- Hernández-Sampieri, Fernández & Baptista (2006), Metodología de la Investigación (4ª Ed). México: Pearson Education.
- Kelmansky, D. M. (2009). Estadística para Todos. Buenos Aires: Ministerio de Educación-Instituto Nacional de Educación Tecnológica.
- Kotler, P. (2001). Dirección de Mercadotecnia, Análisis, Planeación, Implementación Y Control (8ª. Ed). Lima: Pearson Educación.
- Monferrer, D. (2013). Fundamentos de Marketing. Castellón de la Plana: Unión de Editoriales Universitarias Españolas.
- Rojas, V. (2016). Efecto financiero de la inversión de Publicidad en los resultados de las Medianas empresas de Guayaquil
- Sellamen-Garzón, A., & Arce-Meza, A. (2010). Las Decisiones Publicitarias dependen de las ventas en los Productos. *Criterio Libre*, 8(12), 143-161.
- Talaya, A. E., García-De-Madariaga-Miranda, J., Narros-González, M. J., Olarte.Pascual, C., Reinares-Lara, E. M., & Saco-Vázquez, M. (2008). *Principios de Marketing (3ª Ed)*. Madrid: Esic Editorial.
- Tellis, G. J., & Redondo, I. (2002). Estrategias de Promoción y Publicidad. Madrid: Pearson Education.

www.retos.ups.edu.ed

# A theoretical review to improve outcomes of innovation in enterprises from the perspective of "Happiness Management"

# Una aproximación teórica para mejorar los resultados de innovación en las empresas desde la perspectiva del "Happiness Management

Dr. Rafael Ravina Ripoll es Profesor de Organización de Empresa de la Universidad de Cádiz (España) (rafael. ravina@uca.es) (http://orcid.org/0000-001-7007-3123)

Dr. Francisco Villena Manzanares es Profesor en el Departamento de Ingeniería del Diseño de la Universidad de Sevilla (España) (fvillena@us.es) (http://orcid.org/ 0000-0001-8753-5590)

**Dr. Guillermo Antonio Gutiérrez Montoya** es Decano de Ciencias Económicas de la Universidad Don Bosco (El Salvador) (quillermo@udb.edu.sv) (http://orcid.org/0000-0003-1305-6030)

#### Abstract

This paper is a theoretical reviews of research in the field of organizational behavior. The purpose of the study is to reflect on how business productivity increases when corporate welfare is promoted. The model theoretical created titled "Generator model of the Culture of Innovation applying Happiness Management" has been divided into several phases, with an outline of the steps which must interact to provide solutions to problems in organizations in the current century. Current trends of management are beginning to consider the principles or philosophy of "Happiness Management" as future trends that can be applied to any organization, regardless of the sector where they operate. That is the reason why nowadays, it is necessary to implement cultures willing to get competitive and sustainable results in the company, thereby renewing in the first place corporate welfare and, consequently, its labor productivity, and secondly improving organizational performance generating competitiveness. Finally, the culture of innovation based on increasing corporate welfare improves the image of the company, being it projected in a positive way towards all its stakeholders.

#### Resumen

En el presente artículo, se plantea una reflexión sobre cómo aumenta la productividad de la empresa cuando se formenta el bienestar corporativo. Se presenta un modelo teórico que va en varias fases en las cuales se esbozan las etapas que deben interactuar para dar soluciones a problemas en las organizaciones en el presente siglo. Las actuales tendencias de la administración ya empiezan a considerar los principios o filosofía del «Happiness Management» como futuras tendencias que pueden aplicarse a cualquier organización independientemente del sector donde operen. Por eso se hace necesario implantar culturas dispuestas a conseguir resultados competitivos y sostenibles en la empresa, renovando con ello en primer lugar el bienestar corporativo y en consecuencia su productividad laboral, y en segundo lugar mejorando el rendimiento organizativo generando competitividad. Por último, la cultura de innovación basada en incrementar el bienestar corporativo mejora la imagen de la compañía proyectándose positiva hacia todos sus stakeholders.

#### Keywords | Palabras clave

Happiness management; culture of innovation; labor productivity; creativity; corporate welfare; competitiveness.

Happiness management; cultura de innovación; productividad laboral; creatividad; bienestar corporativo; competitividad.

# 1. Introduction to corporate welfare

Currently, we live in a globalized and interconnected economy, where the labor force with high academic training is established as the real engine of innovation and transfer of scientific knowledge, as long as there is an industrial fabric in information and communication technology (ICT) as well as an educational teaching system which boosts it inside their classrooms: reflective thinking, creativity, talent, happiness, entrepreneurship, etc. Both factors contribute to the boost of the productive activity of universities in generating collaborative research contracts, consulting revenue, licensing, patents, and spin-off and start-up companies.

In the Big Data era, human capital with higher education in engineering and computer science is one of the main assets owned by technology-based multinationals when establishing innovative strategies in goods, services and processes. Such entities earmark strong monetary resources to internal R & D as well as developing a human resources policy that encourages the collective commitment and job satisfaction. Among other things, the latter requires an internal environment that encourages the Aristotelian discussion, self-esteem, teamwork, social relations and subjective well-being of workers (Zelenski, Murphy & Jenkins, 2008). Nowadays, no one argues that much of the economic success of the spin-off and start-up companies mainly comes from owning a staff of creative, innovative and happy employees (Binder & Broekel, 2012). Considering this, we intend to expose that labor happiness helps improve the organizational climate improving the productive yield of its human capital, and thus, the competitiveness of the company. On the other hand, the top management of companies is the one which should act and engage directly in fostering a work style that promotes subjective well-being at all levels of the organization, using incentives for instance. This fact requires, among other things, the creation of a suitable work environment to foster flexibility, enhancing shared mindset, talent, innovation, participatory learning, engagement, efficiency, dynamism, adaptability, etc. (Ulrich & Ulrich, 2010).

Seligman (2003) says that professional development has a great influence on subjective well-being of individuals. From this statement, a large number of researchers, especially psychologists and economists, are becoming interested in the study of corporate culture of companies which are focused on providing happiness to its employees (Luthans & Youssef,

2007). In this way, we can know if labor happiness is a key factor in accelerating creative and innovative processes developed within organizations, especially in those ones with a digital and technological basis. As a curiosity, Google was one of the first multinationals in the world to carry out some mindfulness and positive mindset courses in order to improve the emotional intelligence of its human capital and promote collective welfare. The implementation of these seminars was made at the same time as the publication of the article entitled 'The Virtuous Organization: The Value of Happiness in the Workplace. The appeal of this academic work is that its authors find out that "in order to make people happy in their life, it is a necessary condition for them to be happy in their work" (Gavin & Mason, 2004). Years later, huge American companies -following the path that had started some time ago by Google-, began to worry about the subjective well-being of their employees as one of the most important intangible assets that companies have available to increase not only the company's corporate image, but also to achieve greater labor productivity (Wright et al., 2002). According to this thesis, we can say that labor happiness should become one of management's main functions and also a human talent (Wolf, 2013). Between 2005 and 2010, literature focused primarily on examining the socio-economic, cultural, demographic, psychological variables that affect happiness or people's subjective well-being (e.g. Mochón & Ahn, 2007; Ferrer i Carbonell, 2012). Explaining workers' corporate welfare from the point of view of the job satisfaction is new because it affects the organizational performance of companies in a very significant way (Beauregard, 2010). Several reasons can justify the lack of a descriptive study about job satisfaction variable in the academic work quoted in the paragraph above. One of them can be caused by the existence of numerous academic studies that have minimized the importance of happiness in companies during the first decade of the century, whose basic aim is to generate wealth by making the required skills and abilities a human talent. Fisher (2010) points out that there are not enough explanations about labor happiness and he suggests that happiness in companies with profit or commercial goals makes them grow significantly.

• A work environment designed to enable empowerment, creativity, affective commitment, interaction between people, collaborative learning, positive communication, and so on.

- An organizational culture based on the principles of fairness, respect, teamwork, tolerance and solidarity.
- A participative and transformational leadership aimed at facilitating the development of the organizational welfare and technological innovation.

Currently, the organizational happiness of companies is a subject which is very rarely dealt with by economic literature (Salas Vallina, 2013), despite the scientific knowledge that states that a person who is happy in the performance of their job is often more creative, productive, effective, innovative, receptive, optimistic, altruistic (e.g. Vazquez, 2016; Dolan & Metcalfe, 2012; Rego et al., 2011; Hosie, & Sevastos, 2009). Therefore, it is not surprising that companies' competitive advantages derive mainly by the subjective and psychological well-being of both their internal clients (Swaroop, 2016; Straume & Vittersø, 2015) customers.

Achor (2010) states that happiness leads to success and those good interpersonal relationships in the workplace significantly increase organizational well-being. This leads big companies like 'Opinno' to a consultancy for innovation, to implement a model of human resource management with the mission of making their employees happy by creating the figure of the chief happiness officer or happy manager. (Gillet-Goinard, Molet & Monteiller, 2016). Therefore, one of the main functions of the professionals targeted in the paragraph above will be to cultivate collective welfare. This implies companies to have a flat, dynamic and flexible organizational structure so that they can promote assertiveness, teamwork, internal communication between management and employees, talent retention, cooperation...etc. But, for those who think that labor happiness does not help achieve the established aims by senior management beforehand, we must say that many academic studies on Happiness Economics have shown the positive link between the share price and the organizational environment (e.g. Erdogan et al., 2012). However, it is a paradox that, despite the dramatic proliferation of literature about the science of happiness, we currently know little about the important role it can play in the implementation of a management model of 'happiness management' in the management of human resources in technology companies (e.g. Cera, 2012). In order to get

more information on this issue, we now turn to labor productivity as the generating element of innovation, creativity and competitiveness.

Happiness is an innate emotion in the nature of the human being and has a tacit on the company, as the members of any organization are responsible for meeting the objectives established by management, and having productive components falls on the performance of the company in both tangible and intangible ways.

As people adapt to the new information and communication technologies, more and more technological knowledge is required and this situation has also been generating companies with new methods and new ways of interacting due to recent and important changes in the economy and in the increasingly saturated markets.

Organizations that propose new methods to understand how to keep their employees happy without increasing costs generates a creative atmosphere that improves organizational performance (this is a real fact in large technology corporations such as Google, Telefónica, etc.). These sort of approaches are far from other types of companies such as SMEs which will gradually need new models to develop competitiveness. The objective of this research is a review of the literature to generate a theoretical approach to improve outcomes of innovation in enterprises from the perspective of "Happiness Management".

#### 2. Labor productivity as a competitive resource for companies

Labor productivity in companies can be guided towards a good working environment by means of taking certain actions to manage time and resources or improving the capabilities of the company, both at a technological and at a procedural level. A good corporate productivity can develop a favorable business management achieving sustainability and the future viability of the company. We must differentiate the terms productivity and competitiveness, although they mutually relate and depend on one another. Productivity is an indicator that helps measure the efficient use of resources in producing goods and services, while competitiveness is defined as the ability that the company has to obtain a higher profitability than other competitors, having a limited number of resources and working factors. Although we are dealing with the productivity of human resources or labor productivity, we can also talk about other types of productivity, (e.g. process productivity, mar-

keting productivity, innovation productivity, knowledge productivity). Obviously, the factors that improve labor productivity directly affect the companies' performance. Some of these factors can be identified as determinants of productivity (such as absenteeism, staff turnover, the use and operation of machinery and other factors from the internal and external environment of the company. Therefore, the organizational culture instituted in the organization is a crucial influence on labor productivity, as a flexible and motivating organizational culture is related to the business' performance improvement.

As it can be seen, the human factor is always present in the productive fact, as it requires the participation of individuals and a permanent social labor relationship to achieve the expected results. In this regard, many authors have suggested the relationship and the positive influence of the human factor in productivity and organizational performance (Kemppilä & Lönnqvist, 2003; Saari & Judge, 2004).

Other studies consider that training directly affects productivity, as the human is efficient and effective. This is conclusive for the success of organizations as the training of human resources becomes sustainable competitive advantage, resulting in the best return from their investment (Lagarda & Urquidy, 2007; Luthans & Youssef, 2004). In literature, the productivity of human resources is considered an indicator of organizational effectiveness as the capacity of the human capital that incorporates the experience, skills and knowledge acquired to find the best way to make the company more efficient and productive (Quijano, 2006). Authors like Visintin et al (2008) state that the enhancement of companies' competitiveness is also achieved by means of improvements in labor productivity.

#### 3. Labor productivity in companies and innovation

It is indisputable that innovation improves competitiveness of companies to cope with an increasingly competitive and more globalized environment. This phenomenon is affecting all companies, regardless of their size or sector. To achieve greater productivity through innovation, the model has been shifted from economic and company management models based on labor and capital (second half of the nineties) to establish the following as critical factors: knowledge, training and intellectual capital, marking the economy based on the management

of knowledge. This means that it has changed from models based on tangible models to models based on value-added or intangible resources. Currently, "Happiness Management" marks a new trend in management models in which to achieve innovative results it is necessary to take the employee's welfare into account. However, the following questions arise: can an employee with excellent training be more efficient and productive if they are working in a motivated way and with a growth perspective or with an incentive plan from the company where they work? To what extent does investing in innovation culture improve the profitability of the company?

The innovative orientation of a company is measured in part by the number of patents, contracts with research center, expenditure on R & D, staff dedicated R & D as the most significant. The relationship between R & D and productivity, has been analysed in the litetature (e.g. Griliches, 1970; Máñez, Rochina-Barrachina & Sanchis-Llopis, 2006; Doraszelski & Jaumandreu, 2013).

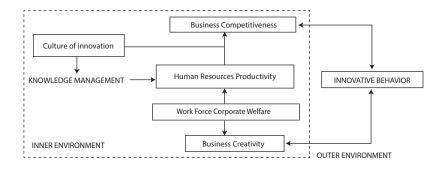
Empirical evidence of a positive relationship between business productivity and performance of R & D can be found in them. For Hall (2011), companies that invest in R & D can increase their efficiency production and improve the products they offer, increasing their demand as well as reducing their production costs, which improves business growth. Do not forget that in academic literature, quality and productivity in companies positively relates. An improvement in quality can lead to an improvement in productivity and this can be achieved by a reduction in costs or by increasing the number of units produced. Crépon, Duguet & Mairesse (1998) studies the relationship between productivity, innovation and investment in R & D, and he estimates that the productivity of enterprises is based on their innovative activities. As we can see, productivity is closely linked to innovation and, therefore, the latter is a key to business and competitive growth. The role of innovation is conclusive to assume technological changes, the emergence of new highly-intensive knowledge sectors, and the emergence of new markets and opportunities.

#### 4. The culture of innovation, creativity and corporate welfare

Innovation and creativity in the workplace have become increasingly important determinants of organizational performance, success,

and longer-term survival. The organizations seek to harness the ideas and suggestions of their employees to achieve competitive advantages (Anderson, De Dreu & Nijstad, 2004; Zhou & Shalley, 2003). Amabile et al (2005) shows that positive flows cause higher levels of creativity in people. The foregoing shows that happiness leads us to creativity and not the other way round. Currently, it is not surprising that managers from human resources departments in large corporations, such as the case of the multinational Toyota, are devoted to continuously improving their productive R & D processes, by creating a positive atmosphere within the organization that exponentially nurtures innovation, emotional intelligence, creativity and corporate welfare (Takeuchi, Osono & Shimiza, 2008). Cameron & Quinn (1999) state that an organization with an entrepreneurial culture is sustained by the commitment to experimentation and innovation. Currently, one of the most important issues is the fact that innovation itself is as important as creating a favorable environment to generate innovation and promote a real culture of innovation within companies. For the latter reason, Figure 1 shows a theoretical model that increases the corporate welfare of the workforce by applying "Happiness Management", and it is capable of generating a "culture of innovation" to improve competitiveness, develop employees' creativity and, consequently, optimize and expand the innovative activities of the company.

Figure 1. Generator model of the Culture of Innovation applying "Happiness Management"



In the previous model, we mainly observed that the corporate welfare of the workforce should be encouraged within the internal

environment of the company where we want to implement a culture of innovation, as a link between entrepreneurial creativity and business competitiveness. At the same time, for the corporate welfare to be effective, the company must manage its knowledge in the most appropriate way. Here at this point, the role of both capacities and resources that each company has available for operation is important, bearing in mind that management is responsible for promoting culture and values. As shown in Figure 1, a productive improvement in human resources, apart from boosting competitiveness, reverts into corporate welfare by fostering a greater collective creativity. In the previous model, if we put competitiveness, productivity of human resources and innovation performance together, they are the variables that generate greater impact on the profitability of an organization. Therefore, a model that fits new business trends where the intangible brings most value to companies to generate profits, is presented. Literature also gives a preferred place to the management style as crucial to be able to manage knowledge, since management style supports the behaviors and goals of the organization. Thus, leadership style is key to adequate knowledge management, being collaborative or participatory styles that favor such a process. When talking about knowledge management it is essential to talk about the corporate culture fostered by the organization, because it determines the set of values or beliefs that define the strategic behavior of the organization for its progress. Knowledge management implies and encompasses many business variables (culture, managerial style, human resources, information and communication technologies, etc.), so it can be better explained from a strategic perspective, and becomes essential when there is a concern for corporate well-being according to the perspective of "Happiness Management".

Corporate happiness is a complex and strategic concept in the management of human resources and organizations. For instance, Baker, Greenberg and Hemingway (2006) contrast that happiness is an organizational behavior and the result of a strategic vision. The definition of happy organization is defined by the same authors as the one in which each individual, at all hierarchical levels, has strengths, works within a team towards a common goal, obtains satisfaction when developing new products or services and, through these new products or services, often provides a positive difference in the lives of others.

Therefore, we can see how the concept of organizational happiness encompasses a wider field than that of job satisfaction. For other authors, business or organizational happiness is a function of affective commitment to the organization, the sense of well-being when carrying out their functions during the job, and satisfaction at work (Hosie, Sevastos & Cooper, 2007).

The relationship between entrepreneurial performance and employees' happiness has been dealt with and discussed by academic literature as an important aspect to be determined, although the different studies vary depending on the different countries where they have been done as well as the types of business and business sectors. Among other researchers, we highlight Hosie, Sevastos and Cooper (2007) as researchers who have tried to determine the relationship between employee happiness and the improvement of business performance. The authors conclude that there is a positive correlation between the performance of the organization and the happiest employees, agreeing with Fisher's study (2010).

As we can see, companies that care about "Managing employees' happiness" in managerial and human resource action not only improve the well-being of employees, but also generate a tool for the very company: "employee's happiness", which has a positive impact on the productivity of the company.

According to different perspectives and studies, we see that a relationship between productivity and happiness is a direct one and, without a doubt, business change has been the responsible for those organizations not only to focus on production and standardization, but also to consider their employees in a different way, as they are the key to success since there is no better intangible factor than the human one.

Other authors demonstrate that happiness predicts important outcomes and indicators, such as an increased productivity and work performance, an increased self-control, an excellent interpersonal relationship and an improved physical and mental health. (Lyubomirsky, King & Diener, 2005; Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011; Pryce-Jones, 2010).

#### 5. Innovation is in the management style of the business model

There is now a broad consensus within business management to point to innovation (whether in goods, services, processes or management systems) as one of the key elements to improve productive activity, increase turnover or achieve sustainable competitive advantages In the market (Robbins & O'Gorman, 2016, Löfsten, 2014, Kmieciak, Michna & Meczynska, 2012, Sorescu et al., 2011, Varis & Littunen, 2010). A large number of researches have been conducted to demonstrate the relationship between innovation and company performance, (eg De Lema, Gálvez-Albarracín & Maldonado-Guzmán, 2016; Mir, Casadesús & Petnj 2016;, & Kuo, 2016, Cho & Pucik, 2005). However, the approaches adopted in these studies have not taken into account variables that are in our theoretical review if we take it into account such as the promotion of job satisfaction and the promotion of corporate creativity as an engine of innovation. In this sense, some studies include the culture of effort and the promotion of employee motivation to improve innovation, for example Kang et al (2016), confirm that companies must adopt business management models focused on increasing the passion of the employees, as well as fostering a participatory climate within the organization, both factors significantly increase the company's innovative behavior and results. Finally, a call is made to the managers of the companies to reflect on their style of management and from the theoretical review made, they are encouraged to promote a leadership style based on Happiness Management for the advantages that are achieved in an intangible way for the organization.

#### 6. Conclusions and discussion

Our theoretical model contributes to the literature of Management Happiness in different aspects: From the dynamic capabilities, we propose that companies are able to improve their innovative results and compete in the market not only because of their ability to exploit their resources and their existing capabilities, but also thanks to their ability to start, renew and develop corporate welfare (Teece, Pisano & Shuen, 1997), emphasizing that the management of knowledge is crucial. A simple and clear model that helps managers exploit their organizational improvement capabilities in a better way is proposed. As for the implications for management, we can show that the proposed

model could improve current management of companies, as corporate welfare optimizes labor productivity and creativity by allowing these companies to achieve the improvement of their innovative results. Anderson, Potočnik and Zhou (2014) propose the following integrative definition on Creativity and Innovation at work: "Creativity and innovation at work are the process, outcomes, and products of attempts to develop and introduce new and improved ways of doing things. The creativity stage of this process refers to idea generation, and innovation refers to the subsequent stage of implementing ideas toward better procedures, practices, or products. Creativity and innovation can occur at the level of the individual, work team, organization, or at more than one of these levels combined but will invariably result in identifiable benefits at one or more of these levels of analysis". This definition is excellent but does not take into account the management of happiness as responsible for generating corporate welfare. We propose a reflection to managers so they can promote a supportive and collaborative environment for their human capital and their stakeholders. This will impact the management of knowledge, which will make everything easier for those companies immersed in a continuous process of change and adaptation, as long as they adopt a flexible and dynamic organizational structure.

From the perspective of *Happiness Management*, we offer a way to develop capabilities of change and help companies with a theoretical model representing corporate welfare, as a process or as a spiral cycle where promoted cultural values are responsible for generating competitiveness and creativity. Both aspects are essential to improve innovation results. As a limitation of our work, just note that the business model presented focuses on business variables, which we considered critical because of their special relationship with innovation. Therefore, one or more additional variables should have been included to study their effects. For instance, the ability to improve competitiveness carried out by high management, or even analyzing how facts such as the company collaborating with technology centers, or keeping strategic alliances with other companies affects the proposed theoretical model. In future research, empirical testing of the model should be done to check its validity and its impact on the management of organizations and their results.

The final conclusions after the literature review support what some authors confirm mainly that a worker is more motivated, has less

absenteeism, is more creative, has better relationships with their colleagues and with clients or other stakeholders, is more productive, etc. All of the above indicates that the companies that manage the happiness in their organization in the search for the subjective well-being of the worker obtain greater benefits and get some satisfied customers improving their productivity (Harter et al., 2010).

#### 7. References

- Amabile, T. M., Barsade S.G, Mueller, J.S. & Staw B.M.(2005). Affect and Creativity at Work. *Administrative Science Quarterly*, (50), 367-403. https://doi.org/10.2189/asqu.2005.50.3.367
- Anderson, N., De Dreu, C. K. W., & Nijstad, B. A. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of Organizational Behavior*, (25), 147-173. https://doi.org/10.1002/job.236
- Andersron, N. Potočnik, K, and Zhou J. (2014) Innovation and Creativity in Organizations. A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, (40), 1297-1333. https://doi.org/10.1177/0149206314527128
- Baker, D., Greenberg, C., & Hemingway, C. (2006). What Happy Companies Know. New Jersey: Pearson.
- Beauregard, A. (2010). Introduction: The Import of Intrapersonal and Interpersonal Dynamics in Work Performance. *British Journal of Management*, (21), 225-261. https://doi.org/10.1111/j.1467-8551.2010.00704
- Binder, M., & T. Broekel. (2012). Happiness no matter the cost? An examination on how efficiently individuals reach their happiness levels. *Journal of Happiness Studies*, (13), 621-645. https://doi.org/10.1007/s10902-011-9283-5
- Cameron, K., & Quinn R. (1999). Diagnosing and changing organizational culture: Based on the competing values framework. Addison-Wesley.
- Cera Cera, R. (2012). "New mission for competitive business: Happiness Management. Human capital". *Journal for the integration and development of human resources* (265), 90-94.
- Cho, H., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. Strategic Management Journal, 26(6), 555-575. https://doi.org/10.1002/smj.461
- Crépon, B., Duguet, E., & Mairesse, J. (1998). Research and Development, Innovation and Productivity: An Econometric Analysis at the Firm Level. *Economics of Innovation and New Technology*, (7), 115-158. https://doi.org/10.3386/w6696
- De Lema, D. G. P., Gálvez-Albarracín, E. J., & Maldonado-Guzmán, G. (2016). Efecto de la innovación en el crecimiento y el desempeño de las Mipymes de la Alianza del Pacífico. Un estudio empírico. Estudios Gerenciales, (32), 326-335. https://doi.org/10.1016/j.estger.2016.07.003

- Dolan, P., & Metcalfe, R. (2012). The relationship between innovation and subjective wellbeing. Research Policy, (41), 1489-1498. https://doi.org/10.1016/j.respol.2012.04.001
- Doraszelski, U., & Jaumandreu, J. (2013). R&D and Productivity: Estimating endogenous productivity. Review of Economic Studies, (8)0, 1338-1283. https://doi.org/10.1093/restud/rdt011
- Erdogan, B., Bauer, T. N., Truxillo, D. M., & Mansfield, L. R. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management*, (38), 1038–1083. https://doi.org/10.1177/0149206311429379
- Ferrer-i-Carbonell, A. (2012). Happiness economics. Series, (4), 35-60. https://doi.org/10.1007/s13209-012-0086-7
- Fisher, C. (2010). Happiness at work. International Journal of Management Review, 12(4), 384–412. https://doi.org/10.1111/j.1468-2370.2009.00270
- Gavin, J.H., & Mason, R.O. (2004). The virtuous organization: the value of happiness in the workplace. Organizational Dynamics Journal, (33), 379-392. https://doi. org/10.1016/j.orgdyn.2004.09.005
- Gillet-Goinard, F., Molet, H., & Monteiller, G. (2016). Happy management: Osez manager par l'enthousiasme. París: Dunod Editions
- Griliches, Z. (1970). R&D and the productivity slowdown. American Economic Review, (2), 343-348. https://doi.org/10.3386/w0434
- Hall, B. (2011). Innovation and productivity. UNIT-MERIT Working Paper Series 2011-028. https://doi.org/10.3386/w17178
- Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. A., & Agrawal, S. (2010). Causal impact of employee work perceptions on the bottom line of organizations. *Perspectives on Psychological Science*, (5), 378-389. https://doi.org/10.1177/1745691610374589
- Hosie, P. Sevastos, P. & Cooper, C. (2007). The Happy Productive Worker Thesis and Australian Managers. Journal of Human Values, (13), 151-176. https:// doi.org/10.1177/097168580701300207
- Hosie, P., & Sevastos, P. (2009). Does the happy-productive worker thesis apply to managers?. International Journal of Workplace Health Management, 2, 131-160. https://doi.org/10.1108/17538350910970219
- Kang, J. H., Matusik, J. G., Kim, T. Y., & Phillips, J. M. (2016). Interactive effects of multiple organizational climates on employee innovative behavior in entrepreneurial firms: A cross-level investigation. *Journal of Business Venturing*, (31), 628-642. https://doi.org/10.1016/j.jbusvent.2016.08.002
- Kemppilä, S., & Lönnqvist, A. (2003). Subjective productivity measurement. The Journal of American Academy of Business, (2), 531-537. (http://goo.gl/RjazVi) (16-05-2017)
- Kmieciak, R., Michna, A., & Meczynska, A. (2012). Innovativeness, empowerment and IT capability: evidence from SMEs, Industrial Management & Data Systems, (112), 707-728. https://doi.org/10.1108/02635571211232280
- Lagarda, A.M., & Urquidy, M.R. (2007). Human capital and productivity in microenterprises. *Economic Research*, (66), 81-115. (http://goo.gl/Sc68Qt) (13-06-2017)

- Lii, P., & Kuo, F. I. (2016). Innovation-oriented supply chain integration for combined competitiveness and firm performance. International. *Journal of Production Economics*, (174),142-155. https://doi.org/10.1016/j.ijpe.2016.01.018
- Löfsten, H. (2014). Product innovation processes and the trade-off between product innovation performance and business performance. *European Journal of Innovation Management*, (17), 61-84. https://doi.org/10.1108/ejim-04-2013-0034
- Luthans, F., & Youssef, C. (2007). Emerging positive organizational behavior. *Journal of Management*, (33), 321-349. https://doi.org/10.1177/0149206307300814
- Luthans, F., & Youssef, C.M. (2004). Human, Social, and Now Positive Psychological Capital Management: Investing in People for Competitive Advantage. Organizational Dynamics, (33), 143-160. https://doi.org/10.1016/j.orgdyn.2004.01.003
- Lyubomirsky, S., King, L. & Diener, E. (2005). The benefits of frequent positive affect: does happiness lead to success?. Psychological Bulletin, (131), 803-855. https://doi.org/10.1037/0033-2909.131.6.803
- Máñez, J.A., Rochina-Barrachina, M.E., & Sanchis-Llopis, J.A. (2006). The decision to invest in R&D: a panel data analysis for Spanish manufacturing. *International Journal of Applied Economics*, (3), 80-94. (http://goo.gl/jiZ1oZ) (16-05-2017)
- Mir, M., Casadesús, M., & Petnji, L. H. (2016). The impact of standardized innovation management systems on innovation capability and business performance: An empirical study. *Journal of Engineering and Technology Management*, (41), 26-44. https://doi.org/10.1016/j.jengtecman.2016.06.002
- Peterson, S.J., Luthans, F., Avolio B.J., Walumbwa F.O., & Zhang Z. (2011). Psychological Capital and Employee Performance: A Latent Growth Modeling Approach. Personnel Psychology, (64), 427-450. https://doi.org/10.1111/j.1744-6570.2011.01215
- Pryce-Jones, J. (2010). Happiness at work: Maximizing your psychological capital for success. UK: Wiley-Blackwell. https://doi.org/10.1002/9780470666845
- Quijano, S. (2006). Human Resources Management and Consulting in Organizations. Barcelona: Icaria.
- Rego, A., Ribeiro, N., Pina, M., & Correia Jesuino, J. (2011). How happiness mediates the organizational virtuousness and affective commitment relationship. *Journal of Business Research*, (64), 524-532. https://doi.org/10.1016/j. jbusres.2010.04.009
- Robbins, P., & O'Gorman, C. (2016). Innovation processes: do they help or hinder new product development outcomes in Irish SMEs?, The Irish Journal of Management, (35), 104-107. https://doi.org/10.1515/ijm-2016-0006
- Saari, L.M., & Judge, T.A. (2004). Employee attitudes and job satisfaction. *Human Resource Management*, (43), 395-407. https://doi.org/10.1002/hrm.20032
- Salas Vallina, A. (2013). Leadership transformational capacity organizational learning and happiness in work. Doctoral Thesis. University of Valencia. (http://goo.gl/Ae-gDy6) (16-05-2017)
- Seligman, M.E.P. (2003). True happiness. Barcelona: Ediciones B.

- Shawn, A. (2010). The happiness advantage. The Seven Principles of Positive Psychology That Fuel Success and Performance at Work. Nueva York: Broadway Books.
- Sorescu, A., Frambach, R. T., Singh, J., Rangaswamy, A., & Bridges, C. (2011). Innovations in retail business models. *Journal of Retailing*, (87), 3-16. https://doi.org/10.1016/j.jretai.2011.04.005
- Straume, L. V., & Vitterso, J. (2015). Well-Being at Work: Some Differences Between Life Satisfaction and Personal Growth as Predictors of Subjective Health and Sick-Leave. *Journal of Happiness Studies*, (16), 149-168. https://doi.org/10.1007/s10902-014-9502-y
- Swaroop, P. (2016). Effects of happiness as a Brand Building Strategy. International Journal of Management and Economics, (2), 547-552. (http://goo.gl/pvu7BI) (16-05-2017)
- Takeuchi H., Osono, E., & Shimiza, N. (2008). The contradictions that drive Toyota's success. Harvard Bussiness Review, 86 (6): 116-124. https://doi.org/10.1108/ sd.2009.05625aad.009
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. Strategic Management Journal, 18(7), 509-533. https://doi. org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z
- Tomas Jodar, D. (2015). The happiest company in the world. Barcelona: Empresa Activa. Ulrich, D., & Ulrich, W. (2010). The why of work. U.S: McGraw Hill.
- Varis, M., & Littunen, H. (2010). Types of innovation, sources of information and performance in entrepreneurial SMEs. European. *Journal of Innovation Man*agement, (13), 128-154. https://doi.org/10.1108/14601061011040221
- Vázquez, S. (2012). Happiness at Work and in Life. A Coruña: Actualia Editorial.
- Vázquez, S. (2016). A people management model oriented happiness at work. Doctoral Thesis. University of Compostela. (http://goo.gl/Ml3qkS) (16-05-2017)
- Visintin, S., Di Meglio, G., Rubalcaba, L., & Cuadrado, J.R. (2008). Competitiveness and international trade in services in Spain. Spanish papers Economy, 65-78.
- Wolf, R. (2013). Corporate Social Responsibility as a tool to increase happiness among workers in an organization". *Indian Journal of Management*, (6), 45-49. https://doi.org/10.17010/pijom/2013/v6i3/59986
- Wright, T., Cropanzano, R., Denney, P., & Moline, G. (2002). When a happy worker is a productive worker: a preliminary examination of three models. *Canadian Journal of Behavioural Science*, 34, 146-150. https://doi.org/10.1037/h0087165
- Zelenski, J. M., Murphy, S. A., & Jenkins, D. A. (2008). The happy-productive worker thesis revisited. *Journal of Happiness Studies*, (9), 521-537. https://doi. org/10.1007/s10902-008-9087-4
- Zhou, J., & Shalley, C. (2003). Research on employee creativity: A critical review and directions for future research. In J. J. Martocchio & G. R. Ferris (Eds.), Research in personnel and human resources management, (22),165-217. https://doi.org/10.1016/s0742-7301(03)22004-1

www.retos.ups.edu.ed

# Feasibility analysis in the production of orthopedic footwear for children in the Province of Tungurahua

### Análisis de factibilidad en la producción de calzado ortopédico para niños en la Provincia de Tungurahua

**Montenegro-Ramírez, Arturo.** Código ORCID: http://orcid.org/0000-0003-0630-2272 Mail: af.montene-gro@uta.edu.ec Teacher - Faculty of Administrative Sciences. Technical University of Ambato

Zamora-Sánchez, Ruth. Código ORCID: http://orcid.org/0000-0003-4982-8741 Mail: ra.zamora@uta.edu. ec Teacher - Faculty of Administrative Sciences. Technical University of Ambato

**Arias-Villavicencio, Valeria.** Código ORCID: http://orcid.org/0000-0002-1213-6621 Mail: valeariass1129@ gmail.com Student - Faculty of Business Administration and Accounting Sciences Pontificia Universidad Católica del Ecuador

#### Abstract

The present study analyzes the feasibility of the production of orthopedic footwear in the province of Tungurahua for children between 0 and 4 years of age, in which pathologies of the feet can be evidenced, which, with proper treatment and footwear suitable, can be solved thanks to the use of the technology with which it proposes to cover a currently neglected market such as orthopedic footwear for early age. The research is of a descriptive, quantitative, non-experimental type with probabilistic sampling, based on the analysis of data obtained during a time horizon of 1 year, having as techniques of information collection direct observation chips and interviews with experts; And a survey using the products that were the subject of research and interpretation was through participatory discussions. In terms of results, the market for shoe production there is very little competition and dedication on the part of producers to develop orthopedic footwear since as indicated it is necessary to make additional investments in order to obtain a quality product. As the main findings of the investigation, it was verified that a great part of the respondents do not know the existence of pathologies, such as: flat foot, pronated foot and supinated foot. Likewise, there is a need to have a specialist in the treatment of foot problems in the manufacturing process of orthopedic footwear, which will verify the use of suitable materials to correct each problem.

#### Resumen

El presente trabajo analiza, la factibilidad en la producción de calzado ortopédico en Tungurahua para niños en edades comprendidas entre los 0 y 4 años, en los cuales se pueden evidenciar patologías de los pies, que, con el debido tratamiento y el calzado adecuado, se puede solucionar gracias al uso de la tecnología, con lo cual propone cubrir un mercado actualmente desatendido como es el calzado ortopédico para edad temprana. La investigación es de tipo descriptiva, cuantitativa, no experimental con muestreo probabilístico, basada en el análisis de datos obtenidos durante un horizonte de tiempo de 1 año, teniendo como técnicas de recopilación de información fichas de observación directa y entrevistas a expertos calzadistas; y la realización de una encuesta a quienes utilizan los productos motivo de la investigación. La interpretación fue mediante discusiones participativas. En lo referente a resultados, el mercado de la producción de calzado existe muy poca competencia y dedicación por parte los productores a elaborar calzado ortopédico ya que como se indica es necesario realizar inversiones adicionales con la finalidad de obtener un producto de calidad. Como principales hallazgos de la investigación, se comprobó que gran parte de los encuestados desconocen la existencia de patologías, tales como: pie plano, pie pronador y pie supinador. De igual manera, se verifica la necesidad de contar con un especialista en el tratamiento de problemas de los pies en el proceso de fabricación de calzado ortopédico, el cual vaya verificando el uso de los materiales adecuados para corregir cada problema.

#### Keywords | Palabras clave

Pathology, children's footwear, orthopedic footwear, marketing, footwear, Tungurahua. Patología, calzado infantil, calzado ortopédico, comercialización, calzado, Tungurahua.

#### 1. Introduction

Tungurahua's business environment offers the characteristics of the territorial proximity for the formation of strategic clusters<sup>1</sup>, which affect competitiveness essentially through the growth of business productivity and technological progress, which contributes to the creation and improvement of products that social needs. Similarly, the collaboration between professionals of the same cluster<sup>2</sup> allows the professionalization of businessman within their economic activity.

The opening of markets to a broader context of trade has contributed to a growth of more competitive environments, where companies must develop their activities. This process of internationalization has affected mainly the most traditional productive sectors due to their inability to face the big global competitors, such as: access to technology, lack of training, limited knowledge of creation, illustration and design of footwear, etc.

Tungurahua has been differentiated from other productive areas of the country due to its business conglomeration, more precisely; it concentrates about 5% of Ecuadorian companies, mostly microenterprises, with a 92.25% share in the province (INEC, 2014).

The provincial economy depends mainly on the following clusters: leather and footwear, trade and repair of vehicles, textiles, wood and furniture, and handicrafts. However, companies no longer consider the cost relationship as an attribute of competitiveness, but they are increasingly aware that they must analyze different factors that help them to have new forms of competition in their productive sector, and that results in a greater investment in the process of design, patronage and modeling of the product and application of innovation, which contributes to improve aspects of valuation by the customers. In the case of the footwear sector, consumers will appreciate different aspects, such as comfort.

They are defined as "industrial networks, industrial systems, technological systems, and resource areas, as meanings similar to cluster" (Almquist, Norgren and Strandell, 1998, p.14)

<sup>2 ...</sup> a set of similar geographically defined activities, with channels of commercial transactions, communication and dialogue, sharing specialized infrastructure, labor market and services, and facing common opportunities and threats. (Rosenfeld, 1996, quoted in Otero et al., 2004, p.7)

In this context, the objective of this work is to present how the successful production of orthopedic footwear in the province of Tungurahua at the present time, will benefit the creation of new products to be available in the market, in order to offer their customers and future consumers a product of quality, with a design that meets their needs, follow the trends and provide added value, which in this case would be the improvement of their posture when walking.

#### 2. Theoretical Framework - State of the Issue

Tirado (2013, p.25) comments that:

The orientation to social marketing has been rebounding from previous times; in this approach, companies are interested not only in the individual consumer, but in society as a whole. Therefore, the needs of all market players (consumers, customers, suppliers, competitors, workers and society in general) are studied, seeking the creation, intensification and maintenance of lasting relationships with them.

It is important to emphasize that at present we see how the conception and application of marketing in the company has undergone a successive reinterpretation of the concept that has abandoned the mentality of past decades to focus on the production and the sale also called "passive marketing", to accommodate to an approach that is more concerned with the consumer, their needs and desires, with the ultimate objective of improving lasting relationships with them and other agents in the environment, these being the new strategies called "active marketing".

According to Vargas (2016) the footwear company *Lombardía*, believes that the impact of strategic planning focuses on increasing knowledge about how to optimize the manufacturing processes of footwear. In conjunction with the research carried out analyzing the probabilities of success and meeting objectives.

From this point of view, planning directly affects production, having an important factor within the lines that mainly handle the manufacturing companies; that is why we are looking for a feasibility analysis prior to the implementation of new production lines such as orthopedic footwear. With all these antecedents, it is proposed, thanks to the definition of Munuera (2011), the product portfolio, understand-

ing "the justified existence of different products in the company and the interrelationship between them" (p.149).

Within the production lines, the product portfolio seeks to be a strategy to balance the unproductive times and to cover with the installed capacity of the company. That is, shoe manufacturers do not neglect the traditional line of business, but also appreciate that the product portfolio can be increased. Thus, identifying opportunities is the ability of an entrepreneur or an entrepreneurial team to collect and consult international, national, regional and local information around the historical behavior of the market where it is intended to intervene in the project to be developed.

Determining the sector to which the project belongs, the segment or market segments of interest to the project, the potential market for product lines or services, and the participation of the main competitors, is fundamental as a baseline requirement, before starting the pre-feasibility or feasibility study (Méndez, 2010). Also, as part of the implementation of a new product line, it is important to carry out a feasibility study, a feasibility analysis and a market study that for Méndez (2010) is the detailed analysis of a project from the following perspectives: market, technical, legal, organizational, investment, sources of financing, income, costs and expenses, financial benefits and socio-economic impact.

However, the feasibility of a project not only covers financial aspects, it is understood as the possibility of developing a business plan in which technical, legal, financial and social feasibility will be taken into account (Méndez, 2010). According to Madorrán-Álvarez & Molins-Martin (2016, pp. 50-70), the market study tries to find out the market response to a product or service, in order to plan the most appropriate commercial strategy.

Before this, the question arises, Is it necessary to define what is a new product and the best appreciation has it, the new products are the blood that gives life to the company and maintains its growth? (Kerin, 2011). If a product differs from existing ones it can be defined as new.

«Product» is defined as a commodity capable of satisfying a need or desire and offered to an objective market for its observation, acquisition, use or consumption. A product is a complex totality of tangible attributes, representations and emotions based on the notoriety of the manufacturer or its brand, etc. (Kotler, 2012). Likewise Chaín (2011)

also considers the product as a set of attributes, which has at least three states that are: the product itself, its characteristics and uses; the added product which is valued by customer for its design, packaging, brand and quality; and the level of loyalty, which includes the installation of the product, delivery time, guarantees and after-sales service.

For its part, the technical study, also called project engineering, starts with the organizational aspect, describing the legal figure of the organization, followed by the mission, vision and corporate values, structure, form of government, and shareholders. It is considered prudent to clarify the competencies of the collaborators or define the jobs (Hernández, 2010). The project's location at the micro and macro levels is then analyzed and it is convenient to analyze the environmental impact. To determine the infrastructure, it is necessary to describe the productive processes that carry the project, the indispensable assets and the investments to be made.

The technical study aims to verify the technical feasibility of product manufacturing, as well as to analyze and determine the optimal size, location, equipment, facilities and organization required for the production process (Urbina, 2013). This study is an integral part of the success of many companies and differs considerably from one industry to another (Jacobs, 2014). In the meantime, a company's key competency is what makes it better than its competitors; such competition can be anything from product design to the sustainable dedication of a company's employees. The process presents the basic sequence of steps or activities with which the company conceives, designs and carries a product to the market, that is, these are the phases of the generic process of product development.

#### 3. Methodology

The present research is of descriptive scope, quantitative-non-experimental design with probabilistic sampling, based on the analysis of data obtained during a time horizon comprised of 1 year (2016). The techniques used for the collection of information were: the use of direct observation cards in the points of sale of the company «Calzado LIWI», an interview with a shoe expert and a survey applied to 112 clients, who use footwear products of the aforementioned wholesale company and who are currently producers of orthopedic footwear in the province of Tungurahua (Ecuador).

The survey, applied through a questionnaire consisting of 10 questions, was validated by the opinion of two professionals-experts in the footwear sector, who have a collaboration link to the Tungurahua Footwear Chamber. The data analysis was performed through the IBM SPSS® statistical instrument and its interpretation was through participatory discussions of the authors.

#### 4. Results

By processing the results obtained in the survey, applied to the potential clients that would be the target public of the company, it was possible to obtain information about the level of acceptance of orthopedic footwear products aimed at infants aged 0 to 4 years of age. Thus, it was found that 84% of the population surveyed would be interested in purchasing orthopedic footwear for their children's feet, while 2% of those surveyed indicated that they were not interested in purchasing this type of product. It is noteworthy that the remaining 14% would be interested in purchasing the product if it were given information on additional aspects, such as: price, colors, design, among others.

In this respect, figure 1 show the factors customers value when buying a footwear product, most notably "durability" with 37% and "quality" with 31%.

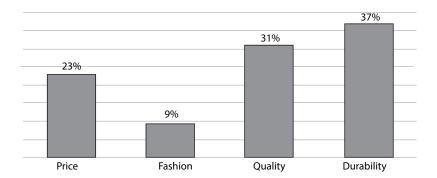
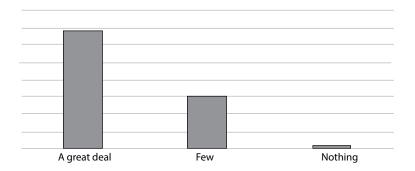


Figure 1. Factors that the clients surveyed value when acquiring a footwear product

In turn, and as detailed in figure 2, respondents consider that the use of orthopedic footwear will improve the quality of life of their chil-

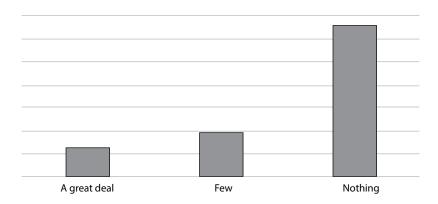
dren, because they can walk with a shoe that will not hurt their walk, but rather will help to correct the detected problems.

Figure 2. Perception of the respondents on the improvement of the quality of life of their children with the use of orthopedic footwear



The survey also provided information on how poorly informed the population is about pathologies, showing that 67% of those surveyed had never heard of the pronator<sup>3</sup> or supinator<sup>4</sup> foot (Figure 3), a problem that affects children in the first years of life and that if it is not treated properly it can leave sequels for the future.

Figure 3. Respondents' knowledge of existing orthopedic pathologies



<sup>3</sup> It is understood by pronation to the footprint whose medial rotation on the axis of the bone, the foot "sinks" inwards into itself.

<sup>4</sup> It is understood by pronation to the footprint whose medial rotation on the axis of the bone, the foot "sinks" outwards.

Another of the pathologies unknown to the respondents is that 55% do not know what flatfoot<sup>5</sup> is, so it is understood that there may be a percentage of the population suffering from flat feet without knowing it, and without knowing also that there are products for its treatment.

Regarding competition, the survey shows that customers do know companies that produce orthopedic products and that offer solutions for foot problems. Footwear from the company "Calzado LIWI" and "Centro Ortopédico Freire" are the best known in the province of Tungurahua.

Figure 4, for its part, details that 94% of the respondents would be willing to buy orthopedic footwear for children if footwear companies increased their supply. This shows that there is an unaccustomed public regarding this type of product.

Yes No Maybe

Figure 4. Intention to buy of the respondents

The prices that the parents of the children would be willing to pay are: USD 39.90 for 79% of the respondents, while the remaining 21% would be willing to pay a price of up to USD 59.90; depending on the benefits that the orthopedic footwear provides (Figure 5). In this sense, 46% of the respondents mentioned having little knowledge about the benefits of using orthopedic footwear and 19% do not fully know.

<sup>5</sup> It is defined as the deformation characterized by the disappearance of the foot bridge, so that to walk the whole plant rests on the ground.

Figure 5. Willingness to pay for orthopedic footwear for your child's feet

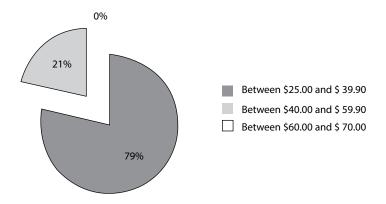
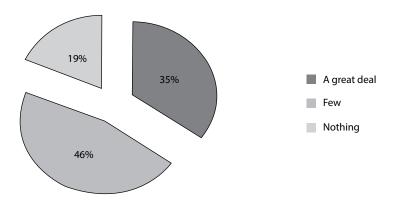


Figure 6. Degree of knowledge about the benefits of orthopedic footwear



The observation sheet in this case helped to determine the feasibility and viability at the pathological level to be able to develop the footwear that will be produced and marketed for the children of Tungurahua. For the study, 112 observation cards, corresponding to each of the children that comprised the sample, were performed between 0 and 4 years old (Chart 1). At these early ages it is essential to identify problems in the infant's support, balance and walk (Chico, 2008).

Chart 1. Results of Observation sheet

Criteria of the March	Number of Observations
Flatfoot	31
Supination	15
Pronation	66

The analysis of the demand within the footwear production sector is now part of the governmental situation that forces each of the producers to offer to the market differentiated products, not only in their materials but also in their functionality, a situation that forces the businessman/producer to carry out an in-depth analysis of the target market it wants to reach, as well as the interpretation of consumer preferences and trends of the new era.

According to the Anthropometric study carried out in 2013 by the National Chamber of Footwear in conjunction with Plasticaucho Industrial, in Ecuador more than 50% of the population presents flat feet, as well as a high rate of obesity, reasons why they are presented the main orthopedic problems such as pronation and supination of the feet (explained above supra in footnote 3 and 4). These pathologies can be corrected in children up to 12 years of age, so it is recommended to use appropriate footwear since childhood.

Taking as reference the last population census of 2010, it is determined that in the province of Tungurahua the infant population (0 to 4 years of age) corresponds to 9% of the population, while in the fascicle of the projection of growth of Ecuador published by the INEC, it is determined that the population of the province of Tungurahua reached a total population of 557,563 inhabitants, of which 9% corresponds to infants from 0 to 4 years of age. Thus, the calculation yields a total of 50,181 infants as a study population; while according to the anthropometric study 50% of the population - that is, approximately 25,090 infants - would suffer from the flatfoot pathology. When using the survey - an exploratory non-inferential character - it is determined that 55% of the population does not know this pathology, so the infant can suffer from it without their parents noticing it.

After analyzing the participation of each of the competing companies, including the company object of the present study, unsatisfied

demand can be determined based on the infant population of the province of Tungurahua (50,181 inhabitants) (see chart 2).

Chart 2. Estimated per capita consumption of shoes

HABITANTS	P/C CON- SUMPTION	TOTAL, CONSUMPTION PER YEAR	% PER. FLATFOOT	TOTAL
50.181	3	150.543	50%	75.272

The unsatisfied demand can be calculated from two different perspectives, such as: Within the applied surveys, one of the relevant aspects is that 45% of the consumers surveyed do not know about the problem, so if this percentage is applied to the population of infants the following is obtained:

Table 3. Consumption of pairs based on ignorance of the orthopedic condition

Total	% Does not know	Total, consumption shoes per year
75 272	45%	33 872

While taken from the point of view of the problem, consumers surveyed indicated that 33% of the population has a relative with this problem (see table 4).

Table 4. Consumption of shoes based on the suffering of the orthopedic condition

Total % Suffer the disease		Total, consumption pairs per year	
75 272	33%	24 840	

That said, for the calculation of unsatisfied demand, the following formula is taken as reference: Unsatisfied Demand (DI) = Supply - Demand, as well as data from the perspective of those who have relatives who suffer from the disease.

DI=9288-24840

DI=- 15552 Shoes

Resulting in 13,085 pairs of unsatisfied demand per year, which account for 1,090 monthly pairs, which means a considerable opportunity for an additional product line to provide consumers with all the benefits of biomechanical construction.

It should be noted that this unsatisfied demand can be covered within the company, since the installed capacity of the machinery and equipment is suitable for the production of 3,000 pairs per month, giving a footwear production of 36,000 pairs per year.

#### 5. Qualitative study

From the interview made to the shoemaker specialist through a questionnaire made up of 15 questions, the following information emerged that complements what was obtained with the help of the surveys analyzed *ut supra*, reason that may have to:

- The most common pathologies in the feet of children between the ages of 0 and 4 years are: flat feet footprints, pronator footprints and supinator footprints.
- It has been investigated and it is determined the non-existence of a previous study that investigates the types of pathologies that suffer the Ecuadorian children, and especially those of the province of Tungurahua (Ecuador).
- The lack of awareness and lack of concern on the part of the parents regarding the pathologies that their children can suffer in their feet cause that in some occasions the use of an extremely rigid footwear and inadequate for the first months of life. Parents are generally unaware that not all footwear products are suitable for children's feet.
- Parents should choose to go to an orthopedic specialist who will
  adequately address the orthopedic conditions of children. Treatments to correct pathologies or deformities in children are up to
  a maximum of 12 years of age, so it is important to recognize the
  problem in early.
- There is no orthopedic footwear in the Tungurahua market that helps to correct or alleviate the problems in the infants of the province. The materials with which orthopedic footwear is designed and elaborated, such as: capella, lining, insole and sole, must be given great importance.
- Orthopedic footwear must contain basic anatomical elements that provide the final product with a biomechanical structure. To achieve all this, we must work on a feasibility and viability investigation

- that allows us to present a product according to the market of the province with national projection.
- Infants' daily footwear provides information about the child's footing and the position of the foot during the walk, which helps to see the client's specific requirement.
- During treatment it is important that consultations with the specialist are carried out on a continuous basis with periods of no more than 3 months. The duration of treatment depends on the type of pathology. However, there are cases of rehabilitation of up to 3 years.
- Only in special cases, that is, depending on the pathology, children
  will need additional devices to correct the recognized problem. For
  the correct treatment of the pathologies it is necessary that the specialists update their knowledge frequently.
- In the footwear manufacturing process, it is important to have an
  orthopedic specialist for foot problems advised during this process
  and a professional patronist to help design a pleasant product that
  catches the attention of both customers and consumers of footwear.

#### 6. Conclusions

Ignorance of the pathologies that can be suffered by children aged 0 to 4 years can produce problems in their feet that can last for up to 3 years. In some cases, parents ignore the existence of problems such as flat feet, pronator's foot and supinator foot; in other cases, the use of appropriate footwear, guided more by fashion and market preferences, can also lead to problems in the correct walk of the infant.

In Tungurahua, there are currently no foot health professionals who have footwear products suitable for each treatment identified for the feet of children. In turn, the parents surveyed expressed their interest in purchasing orthopedic footwear for their children if there were a greater supply of these in the market, giving importance to factors such as quality and durability, rather than price or fashion.

It is of vital importance that the pathologies are recognized by the specialist in the first years of life because, depending on the identified problem, the treatment can last up to a period of 3 years, being the maximum age to correct the disease 12 years of age.. The observation sheets showed that improper use of footwear can cause poor foot placement and may give rise to a future problem.

For a correct manufacture of orthopedic footwear aimed at children at an early age it is necessary to have the advice of a specialist to ensure that the product is being developed in the right way and with the appropriate materials.

#### 7. References

- Alcántara, E., Artacho, M.A., González, J.C., & García, A.C. (2005). Application of product semantics to footwear design. Part I Identification of footwear semantic space applying differential semantics. *International Journal of Industrial Ergonomics*, 35(8), 713-725. doi: https://doi.org/10.1016/j.ergon.2005.02.005
- Almquist, G., Norgren, L., & Strandell, A. C. (1998). Clúster and clúster policy in Sweden. Stockholm: The Swedish National Board for Industrial and Technical Development (NUTEK).
- Cámara de Calzado de Tungurahua CALTU (2011). En sitio web: http://www.caltuecuador.com/
- Chaín, N. S. (2011). Proyectos de Inversión, Formulación y Evaluación. Santiago de Chile: Pearson Educación.
- Chico, F. (2008). Pie y Calzado: Diseño Biomecánico. México DF: CIATEC.
- Hernández-Sampieri R., & Fernández Collade, B. L. (2006). *Metodología de la investigación*. México DF: McGraw-Hill.
- Instituto Nacional de Estadísticas y Censos INEC (2014). En sitio web: http://www.ecuadorencifras.gob.ec/institucional/home/
- Jacob, R. B. (2014). Administración de Operaciones Producción y Cadena de Suministros. México: Mc Graw Hill / Interamericana Editores S. A. de C. V.
- Munuera, J. (2007). Estrategias de marketing: un enfoque basado en el proceso de dirección.

  Madrid: ESIC.
- Kerin, H. R. (2011). Marketing. México DF: Mc Graw Hill.
- Kotler, P. (2012). Fundamentos de Marketing. Madrid: McGraw-Hill.
- Madorrán-Álvarez, M.E., & Molins-Martin, M. (2016). El Estudio del Mercado. Madrid: McGrawHill.
- Méndez, R. (2010). Formulación y evaluación de proyectos; enfoque para emprendedores. Bogotá: Incotec Internacional.
- Otero, G., Lódola, A., & Menéndez, L. (2004). El rol de los gobiernos subnacionales en el fortalecimiento de Clúster productivos. Consultado en agosto de 2005, de http://www.ec.gba.gov.ar/GIE/Investigacion/Archivos/Abril2004.pdf
- Prospecta, C. D. (2013). World Footware Yearbook. Obtenido en enlace web: http://www.prospecta.mx/pdf/340.pdf
- Tirado, D. M. (2013). Fundamentos de Marketing. Castellón de la Plana: L'une.
- Tirado, S. (2012). Administración de la Producción. México DF: McGraw Hill.
- Urbina, G. B. (2013). Evaluación de Proyectos. México DF: McGraw-Hill/Interamericana.
- Vargas, T. (2016). La Planificación Estratégica para mejorar la producción en una empresa artesanal de calzado. Ambato: PUCESA.



Would I do it again?
Revisiting the implementation of the entrepreneurship paradigm in a University

## ¿Lo volvería a hacer? Revisitando la implementación del paradigma del emprendimiento en una Universidad de México

Oscar Montiel is leader of the Research Group Creativity, Innovation and responsible Entrepreneurship and Cap. 20 of Entrepreneurship, Incubation and Business Creation of the Academy of Administrative Sciences (ACACIA) (Mexico) (oscar.montiel@uacj.mx) (http://orcid.org/0000-0003-0434-1649)

Claudia Ivette Rodríguez Lucio is a professor and researcher at the Universidad Autónoma de Ciudad Juárez (Mexico) (Ivette.rodriguez@uacj.mx) (http://orcid.org/0000-0002-6135-4799)

#### Abstract

in Mexico

Autoethnography is a recognized research method used broadly in the social sciences. Its use within the area of entrepreneurship has been scarce, few researchers in this area have used the narrative itself (Engstrom, 2012). This article deals with the experiences of two teachers members of the university's entrepreneurship transversal academy, and its experience in promoting it as the engine of a paradigm shift on a public university in Mexico, revisiting it now using analytical generalization following Chang (2008). The results suggest a broad reflection on organizational, social and cultural aspects, which are immersed in the processes of change in every institution, and how they influence the intention to modify the recent context to one where creativity, innovation and entrepreneurship are the axes that contribute in reach the new national and global policies directed towards the formation of an entrepreneurial ecosystem in a university.

#### Resumen

La autoetnografia es un método de investigación reconocido y utilizado en las Ciencias Sociales, aun cuando su uso dentro del área de emprendimiento ha sido escaso y pocos investigadores de esta área han utilizado la propia narrativa (Engstrom, 2012). El presente artículo aborda desde este método las experiencias de dos maestros (Montiel & Rodríguez, 2016) al realizar la gestión y ser miembros de una academia transversal enfocada al emprendimiento, y narra sus vivencias al impulsarlo como motor del cambio de paradigma de una Universidad pública en México, revisitándolo ahora desde una generalización analítica según lo sugerido por Chang (2008). Los resultados apuntan a realizar una amplia reflexión sobre aspectos organizacionales, sociales y culturales que están inmersos en los procesos de cambio de toda institución, y cómo estos influyen en la intención de modificación del contexto reciente hacia uno doda la creatividad, innovación y emprendimiento sean los ejes que coadyuven a las instituciones en alcanzar y estar a la par de las nuevas políticas nacionales y globales dirigidas hacia la conformación de un ecosistema emprendedor.

#### Keywords | Palabras clave

Autoethnography, entrepreneurship, transversality, entrepreneurial university, entrepreneurship ecosystem, organizational change

Autoetnografía, emprendimiento, transversalidad, universidad emprendedora, ecosistema emprendedor, cambio organizacional.

#### 1. Introduction

An opportunity that I could not ignore. I had just been hired as a research professor and started an academic career after 15 years in the family business. I did not know anything about entrepreneurship as a construct, nor about its environment. I was offered to take charge of the business incubator of the University. The context was very good, there was support from the government and the institution. We started with great strength and we started to grow, both in said area and professionally. Then everything changed. It became a crossroads. On the one hand, the government redesigned the support system for entrepreneurs with the constitution of the National Institute of Entrepreneurs (INADEM). On the other, budgetary shortages arose, and supporting entrepreneurship in the institution was increasingly-and rightly so-more difficult. The accreditation bodies of the Association of Universities and Institutions of Higher Education (ANUIES) began to demand indicators of entrepreneurship in academic programs. Already in 2011, it was proposed to operate a Transverse Entrepreneurship Academy (ATE), composed of teachers from the four institutes, and to have the opportunity to exchange experiences in that area. However, the lack of continuity in their leadership and interest truncated the effort.

That being so, and with some people looking skeptically at this project, in September 2013 I am appointed - at the same time as I was of the incubator - coordinator of the ATE. Without exaggeration, it was starting from scratch and on many edges. Already Sperrer, Müller and Soos (2016) point out that there is still relatively little knowledge about best practices on how to develop and implement new entrepreneurship programs in universities. The present narrative is a modest contribution to this state of the issue from a non-traditional perspective: Autoethnography.

The University has about 28,000 students. The aim of the ATE was to promote and support the development of an entrepreneurial ecosystem and culture in the university community and in the region. Its vision was to promote a comprehensive education in students, helping to improve the quality of life in the region by promoting creation of companies, intrapreneurship in organizations and innovation in general, making the University the national and state leader in the culture of entrepreneurship. As a long-term goal, we also wanted to cooperate in the construc-

tion of an internal ecosystem of creativity, innovation and entrepreneurship, based on the Rainforest model and the Aspen Institute.

It had academic transversality and multidisciplinarity (suggested by the World Bank and the United Nations), composed of entrepreneurs of the four institutes (Administrative Sciences, Engineering and Technology, Architecture Design and Art, and Biomedical Sciences). Approximately 50% of its members had entrepreneurial experience.

Some of the activities that emerged from the ATE were:

- Homologation of contents of the subject in the 4 institutes, with the newest methodologies: i) Lean Startup; ii) Opportunity Canvas; iii) Lean Canvas and; iv) Business Model Canvas.
- Conversations and training activities of the Mexican Institute of Industrial Property (IMPI) to students.
- Establishment of the "Day of the Entrepreneur", today a different management changed the name, but the format, highly criticized back then, curiously is very similar. There were 5 events per semester, 369 entrepreneurial projects, in which a total of 1292 students participated, 3292 attendees and several lectures given.
- Foundation of the research group Creativity, Innovation and Entrepreneurship.
- Successful participation of students in competitions, obtaining regional and national awards.
- Communications published in conferences and research published in national and international refereed journals.
- Beginning of the book series «Entrepreneurship: Multidimensionality, Change and Innovation», involving national and international researchers.

There is no known national or international institution that manages a model such as ATE.

#### 2. Method

Authors like Tahar (2009) and Ellis, Adams and Bochner (2010) point to autoethnography as a valid research strategy. Even though there have been opposing voices, the literature suggests that it is an outdated context (Denzin and Lincoln, 2000) with an increase in its use and

acceptance within anthropological and sociological (Haluza-DeLay, 2008; Muncey, 2010) and educational (Starr, 2010) research.

Autoethnography involves investigating oneself, writing experiences that have had a significant impact on the life of the researcher (Ellis, Adams and Bochner, 2010). This method was selected because its process gives a deep access to these experiences, simultaneously addressing the object (subject) and subject (researcher), providing an examination of these in relation to similar ones experienced by others, as a means of finding patterns or theories. It addresses social facts in great detail (Pole and Morrison, 2003), are "highly personalized, revealing texts in which the authors tell stories about their own lived experience, relating the personal to the cultural" (Richardson, 2003, p.512), while its strength is that it communicates "the immediacy, physicality and emotionality of experience, but also its psychological and social elements, the writer's internal dialogue with himself and also situate the experience within a broad social context" (Allen -Collinson and Hockey, 2005, p.193).

Engstrom (2012) points out that, in recent years, entrepreneurship researchers have started a movement where the goal is to study and describe it under narrative strategies (Rae and Carswell, 2000, Hjorth and Steyaert, 2004, Berglund, 2007). Fletcher (2011) comments on the seminal work of Johannisson, who investigated entrepreneurship by deepening their contextualization (communities, regions and families), opening new possibilities to research methods that would locate the researcher as a participatory actor.

Autoethnography challenges orthodoxy that places the researcher as a neutral and silent entity, which may leave him vulnerable to being considered "irrational, particularistic, private and subjective, rather than reasonable, universal, public, and objective" (Greenhalgh 2001, p.55). This is still necessary for a variety of authors who suggest that forms of inquiry remain anchored in positivistic assumptions and respond to "methodological orthodoxy" (Hesse-Biber, 2010, p. 455). The present article - also made by Gottlieb, 2015 - solves it including an account of another member of the ATE, which provides an exercise of reflection towards the researcher and the reader. Similarly, an analytical generalization is made to correlate, as Chang (2008) suggests, the expe-

riences towards the cultural and social part, resulting in self-analysis and transformation (Chase, 2011) and allowing a contrast.

In autoethnography the first person can be used to elaborate the story (Ellis, Adams and Bochner, 2010) and usually occurs when the author has observed, lived or participated in an intimate way the history or social fact that is intended to be analyzed. Sometimes the second person is used to take readers to the scene, to actively go along with the author, to witness the experience being told, to be part of and not to be distant from the reported social fact (McClave, 1996; Pelias, 2000), even use the third person to establish the context, to report the results and to present what others do or say (Caulley, 2008). In the present investigation, these recommendations have been followed, trying to narrate in the first person the introduction and the story, while in the third person the sections of method and conclusions are written.

#### 3. Analysis and Results

#### 3.1. Narrative 1

The Paradigm Shift

From Lewin (1951) to Cummings and Worley (2007) and Macrì et al. (2002) all have addressed the resistance to organizational change, but a review of the literature suggests that it has been scarcely addressed in the case of universities.

Under scientific support and after a process of reflection, I thought that entrepreneurship could be a tool of change to build social capital, change paradigms and reconstitute social and industrial fabrics in the short, medium, and long term, both for the city and for own institution, taking as a reference the city of Barcelona, considered by the Organization for Economic Cooperation and Development (OECD) the model to follow.

So, I went to the task of locating the teachers. I discovered that, in each institute, even when the contents were oriented towards this theme, the names of these subjects were different. In August 2013 the first attempt to reactivate the ATE was carried out. The invitation was made by means of emails, however, the answer was null. Therefore, I went with my superior to invite the teachers by office, sent from

his immediate headship. The response obviously improved: 8 people attended, mostly teachers I didn't knew. The good news is that there were assistants from all the institutes and this was strategic for the formation of the ATE.

What was the objective? Simple: Inserting the University into a paradigm shift, institutional concerns that were beginning to permeate internationally (such as the exposed by OECD, 2012). For 40 years, it had developed a very efficient mechanism to meet the demands of the labor market, but today, like most universities in the country, it was inserted in a new dynamic: to generate entrepreneurs. The context demanded indicators of this. Simple, is not? But it was a monumental task.

Already Kuhn (2005) had described paradigm shifts and their difficulty. I had to sell the idea of how to change ours, and that involved an arduous task. I was well aware that there were many risks. Sacrificing the completion of my doctoral studies, with the impact it would have on my income - something never valued by anyone -, time, develop an inclusive and flexible work plan, and design strategies that would be implemented without prior institutional experience.

The first major challenge was to approve the descriptive letter, which should reflect in its content the most recent methodologies on entrepreneurship, focused in principle on the opening of companies. It was all a success. The discussions were extremely enriching. There were particular points of view and problems that no one noticed before. Unlike what Nwekeaku (2013) commented on, we managed to make a change in the teaching process, approving the content of the subjects was relatively easy.

#### Rotation Between Institutes

The idea was for the institutes to rotate among themselves the management of the ATE in order to encourage an inclusive and transversal dynamic. Tasks were divided under these terms, but it did not work. It is systemic. Most fee teachers always showed the best disposition, while others never did what was required or their support was reduced to what was indispensable. For their part most of hose who were full time, showed similar behaviors, since the tasks they performed were not fully reflected as activities valued in the institutional stimulus program, so they had no economic incentive, something that should be linked to

the institutional strategy - as recommended by the OECD (2012)-. The activities were concentrated in me and in 5 teachers. The remaining members almost always shone by their absence, but not their criticisms, usually not constructive, inside and outside the ATE.

#### The Day of the Entrepreneur

An angular point, already commented by the OECD (2012), was to carry out an inclusive and representative entrepreneurial event of our university community, as suggested by Sperrer, Müller and Soos (2016). I named it "Entrepreneur Day" and organizing it in that context was very complicated. We did not have recognition as ATE in the University; in every door that was knocked we had to explain its objectives and those of the event.

We did not have our own resources or equipment (in line with what was also narrated by Nwekeaku, 2013), everything was lent by various instances of the University, who very kindly gave me their trust, always received me with much attention and availability. Having overcome this obstacle, I started approaching the local businessmen so that they accepted to attend like judges of the competition. We were not clear on many things, so I did benchmarking with similar events held in the United States. Thus was born the «Business Pitch», which was carried out by the finalists of each category.

It was decided to conduct this activity every six months, despite the enormous work and time involved. We considered in the ATE that as long as we did not measure that the entrepreneurial culture in the University had already a significant level, it was necessary to do so, a *sine qua non* condition for our mission and vision. The teachers sent a list with the projects of their classes and they all had to attend.

The number of participants averaged 80 projects. They were classified into traditional and technological projects. It was held in the university gymnasium, with capacity for 5,000 people. The day of the event, open to the general public, was attended by about 1500 people. At times (second and fifth day) there was budgetary support to rent stands for the projects. At the other events, two institutes had to be asked to provide their wooden screens (not in the best conditions and very small) for students to use as stands. Aesthetically they were not the best, but there was no other way. We always thanked them; we worked as hard as we could.

Students settled from 7 to 9 in the morning. At 8 I had a meeting with judges who would qualify Phase A, that is, projects at a rate of 8-10 stands per judge for a maximum of 5 minutes in each. I explained what we expected of them, how to qualify, if they had doubts about the format to use. To support them, students were assigned volunteers to accompany them on their way. Those with the highest 15 qualifications went to phase B. In this one they realized a "Business Pitch" with maximum duration of 2 minutes before another jury of entrepreneurs. There were three winners (first, second and third place) in each category.

Difficulties? Yes. Huge. But there was more passion and commitment. The first day was just 2 months after starting the management of the ATE in November 2013. It was a watershed. Never in 40 years had the university done something similar. We did it in the lobby of the theater, very modestly. There were only 29 projects coming from all the institutes. I would lie if I said we were clear how to manage it, but it was now or never: we had to take the risk; if we waited, the event would not take place until May 2014. We considered it was too long, we had to break in, give a *coup de grace*, and show that really the ATE under my leadership was serious and committed to our authorities.

By the second day we went big. We had to continue innovating, because we are a great University with much prestige. I had to go to request funds from each institute to carry out the event. Some people remained skeptical that we could organize it in the largest and most important space of the University. The current paradigm did not see the size of what was at stake. However, the reception of the institute's directors and the top management of the University was sensational. All supported. Everyone gave me their vote of confidence, something that I will always value. It was exhausting, too much responsibility. Most of all, projects, guest entrepreneurs, recognitions to print, equipment to borrow, promotion. Everything was 10 times more.

#### The Bussinesman

It was vital, strategic. It strengthened the external relations of the institution and the exchange of knowledge (OECD, 2012), and validated many dynamics. It gave us a presence throughout the city and above all in the business sector, thus strengthening our institutional mission and vision. I quickly empathized with them. I guess my business background

helped. Inviting them was not only a strategy for the construction of the internal ecosystem, but also because we did not want academics to evaluate entrepreneurship projects, something that happened during the first day. It lent itself to bias and misunderstandings. It was a constant attempt to make processes transparent.

Inviting them was also to make the experience of our students more comprehensive. That they felt demanded. At the previous meeting I asked them to always be demanding when evaluating. It was not and is not the only way to raise the level of the projects; I understood that, however, was a way that we had within reach. They always had a disposition and the ATE was very grateful for it.

## National and Binational Impact

To have an American University interested in our strategies, have traveled to attend as judges and ask for support for the management of their first "Entrepreneur Day"... I do not think this is a small thing, and this internationalization is suggested by the OECD (2012). They also participated with a chapter of the second and third books of the series, explained *ut supra*. On the other hand, another American institution invited us to explore binational research dynamics through two projects, and collaborated with a chapter in the first and second books. We were doing something well.

Institutionalizing the Day of the Entrepreneur and the Academy Little by little, the University as an institution began the process. The opening of the Headship in innovation and entrepreneurship was a transcendent step. The Institute of Engineering, instead of continuing to add to the institutional dynamics, started in parallel an event also of entrepreneurial cut. Several people told me "it's a copy of ours". Who cared! For me the important thing was that it will initiate the change. In recent times, the ATE was nominated by the institution to compete in the National Entrepreneur Award of the National Institute of Entrepreneurs of Mexico (INADEM). It was the highest point. I felt that all the work of the ATE was recognized.

A year and a half ago I left the coordination. I hope the mechanisms are adequate so that the work done is not lost. It would be a pity, not for me, but for the University.

#### The Road Towards Research

Members were always invited to conduct research on the subject. There was little response. The vast majority of the members of the ATE were fee teacher, so they were not rewarded - obviously an entrepreneur would not see it that way. And in those who were full-time, who were recognized through the stimulus program, perhaps they did not see the potential we could generate. It was to start from scratch, since the easiest way was to belong to a consolidated academic body that allowed access to funds and networks already established. And some actually chose it.

In spite of all this I did not give up and together with an ATE collaborator we took a risk. He believed in me and I could not fail. It was a success, and there have been many collaborations.

When I felt that the ATE had reached some stability and maturity, I considered presenting to the authorities of the University the formation of a research group in Creativity, Innovation and Entrepreneurship. For internal policies, they had not been authorized for several years. However, our proposal was. This ended up driving the vision. It was no longer just an academy of teachers that fostered entrepreneurial culture and had some institutional impact, suggested by the OECD (2012). We were starting a new stage: Generate knowledge, position ourselves as national and international referents, under a temporary structure in the short, medium and long term.

This group was designed following the principles of the ATE, multidisciplinary. Of the series already mentioned, there are two books published by the University, construction of national and international networks, participation in congresses, too much in only a year and a half. In the invitation for presentation the first book there were details, but my colleague and I, coordinators of the series, ignored them. It does not matter anymore.

## The Informal Barrier

How can the debate be of such a low level at times? I remember long ago I read an investigation about the mobbing (labor harassment) in universities of Spain Anecdotes? Too many. Since I always won with my students some prize in the events, that there was something strange about it, that if I manipulated the evaluation table - which was always intentionally in front of the public, where anyone could verify that the

evaluations were correctly done- there are so many! One teacher even claimed that his students had not received 2 evaluations of the judges, only one, despite the fact that the folder containing these were in front of him and he never wanted to review them. He still remarked that the second one had probably been sneaked away and in a bathroom, as if we were farm thieves. And that person "well, because the Comptroller's representative was present, but not all the time" What fault did I have that my students were well prepared, with innovative ideas, always trying to transcend, to be demanding with themselves and the vociferous never won anything?

When I got cash prizes for the winners for the fifth day, the same thing happened: Accusations that they were going to spend it on beer, that we had to supervise where they put it... if there were no prizes why we did not get funds, and if the we got... I do not understand. But ah! In the family photo they always appeared.

But the results were given under my leadership that, at 2 years, when it was time to relieve the coordination, the decision was reelection with 5 votes against 3. Of course they challenged it, even when the university authority was present giving faith, everything within the regulations. Why did they re-elect me? They considered that even though it had been agreed to rotate coordination by institute to support its transversal approach - something that was respected in the Days of the Entrepreneur, since each institute organized it - we had still to solidify some elements of the plan, reason why was better not to restructure until the ATE was more institutionalized.

Why the Mexican does not tolerate success? Paz (1959) talked about it. Cultural and social general obstacle commented on by Fogel, Hawk, Morck and Yeung (2005). Board after board, could feel the enormous effort and results of our action. I guess it's the price of changing a paradigm. It should not be like that. We are peers, professionals, with an educational level, masters, doctorates. If something, however small, went wrong, they tried to magnify it. It's not worth writing more about it. The mediocrity of which Ingenieros spoke (2008) was always around. Organizational sabotage described by Young (2000) and Nwekeaku (2013) as a result of the lack of a change in the informal valuation system that exists in every organization - already described from its perspective in Nigerian universities.

Most of them, those who always trusted me and re-elected me, but above all to my authorities who always supported me, I can never pay them all the effort they did and do.

## Separation Decision

Everything has an end. It was time to separate from the coordination of the ATE. Leadership must end in a timely manner. By 2 years I had made the mistake of not separating myself from the coordination of the business incubator just when I got the INADEM national accreditation. Months later came the problems, unrelated to the University that put an end to years of effort - I had built a network of state incubators, the few existing in the country-. It was time to start a new professional and personal path. The authorization of the research group required full time. The fifth "Entrepreneur Day" had been a success. Entrepreneurs, authorities, students, at the Academy felt the atmosphere. At the opening ceremony it was palpable. But the research group needed to take off and from another trench to support the construction of the ecosystem. There was a plan and we could not fail.

## Acknowledgment to my House: The University

Definitely. The experience that my institution gave me is invaluable. It was an indescribable opportunity. It made me have even more passion for entrepreneurship and its business and social relevance. The «t-shirt» I have it tattooed. It sounds too political, I do not care. It is and will be.

Final considerations? If something went wrong, it was me. If something went well we all were. You undertand me? But again, there was no other way, my prestige was at stake. I do not want to sound dramatic, nor be a hero. It is not my intention. I always decided the last thing, there was a lot of responsibility towards the university, the people who supported me, my vocation as a researcher, my entrepreneurial DNA. What can I do? It cost me a lot financially speaking, labor frictions, uncomfortable moments. But it was worth it.

I believe that the members of an ATE must be entrepreneurs by nature and practice, so that they can gain new skills. This is also suggested by Nwekeaku (2013), since entrepreneurship is vital to the teaching process. A true entrepreneur knows and decides to work as a team, because it is the easiest and smart way to achieve most of the

results. Therefore, I believe that you should choose - and not just to be entrepreneurship teachers - carefully the members of an ATE. Its nature is very different from most academies at the university level.

I spend almost 3 years. But I have received, even in spite of some bad experiences, other rewards. I designed a virtual entrepreneurship seminar, unique in its kind at an international level, and others are coming up for 2018 and 2019. I have been appointed for the next three years responsible for the entrepreneurship chapter of the prestigious Academy of Administrative Sciences A.C. of Mexico (ACACIA). Being an entrepreneur is in my veins. Transcend. Always.

I would do it again? YES.

#### 3.2. Narrative 2

## A Personal Entrepreneurship: The Ate

At the beginning of 2014, being a fee professor of the Graphic Design program and having a degree and a master's degree in research related to creative processes, I was usually assigned theoretical subjects related to these subjects. However, to my surprise and even a little dissatisfaction, at the beginning of the semester I was assigned the subject of business training attributed, I think, to have a technical career in Administration. I confess I was within minutes of asking to be withdrawn, because in a personal commitment it seemed to me that I was not the right person. I took it as an opportunity to leave my comfort zone and learn new things without knowing that I would face a challenge that would turn my life around, personally and professionally.

In March 2014 I arrived at the ATE at the invitation of a teacher with whom I shared the teaching of the subject. The first thing that struck me was the transversality of this one: there were teachers of the four institutes, something that had never lived in any academy within the University. It was very interesting to hear the diversity of points of view and, although in the masters we discussed transversality, interdisciplinarity and multidisciplinarity, it was not until this moment that I had the opportunity to feel this concept, as mentioned by Bolivar (1998, 60) "the discourse of transversality can remain in a discursive practice shaped by a political rhetoric that creates expectations but then, in practice, cannot generate the expected changes." And this was the opposite of the objective set by this academy and the actions that

were carried out with the aim of achieving it, so that the commitment, passion, enthusiasm and entrepreneurial sense of the members of this academy were for me the larger incentive to seek together the generation of a paradigm shift.

## 4. Paradigm Shift and Day of the Entrepreneur

The University for years was visualized under a scheme of generator of employees for the different needs of the context. However, the demands of the current market required that we redefine and restructure strategies (OECD, 2012) that would make our students more competitive and help them adapt to the new times. In addition, changes in governmental and educational instances demanded a barter in the current structure, but permeating these transformations has been simple. Turning the direction towards the creation of an entrepreneurial culture that helped to manage the own development and to identify new areas of opportunity and competitive advantages to be taken advantage of was at least a challenge because the mentality had to be modified from the teacher. The chaotic, complex and lacking linearity of entrepreneurship suggests that their teachers must develop competencies in discovery, reasoning, and implementation so that students can excel in today's highly uncertain environments (Neck and Greene, 2011).

Through the work carried out in the ATE, contents were unified in the descriptive letters which allowed all students, although the disciplines were different, would have the same skills, knowledge and tools to develop as entrepreneurs. However, achieving this alone within the classroom was not enough. It was necessary to get the student to visualize and to believe him/herself an entrepreneur, for which they participated with this project and in the event managed by the ATE.

The challenges and difficulties to achieve this were great. First to build good projects dealing with academic deficiencies, in my case the area of finance. In other cases the visual development of the project, among other things, that we had to solve with quick instructions of the subjects or with invitations from expert teachers to help us in those areas that were not mastered, obstacles already warned by Seikkula-Leino (2007), until the student acquired and became passionate about the possibility of turning his/her project into reality. However, work in the classroom, though arduous, was much less challenging than the

management of the event and all the budgetary, time-consuming and passionate obstacles in the work required for achieving it. Although the ATE was made up of several members, only a few expressed a real commitment and often sacrificed family, time, and money for a project that had been raised together and for the longing to accomplish it.

Event after event the difficulties that unfortunately not only came from outside but some of them came from the heart of the ATE, until the fifth "Day of the Entrepreneur", an event that obtained support from the department of liasson f the University, where we succeeded in getting the strategy up to another level, known through the institution and understood as a priority (OECD, 2012). In this activity, more than 80 projects were exhibited and stands were set up for each one, where high schools were added and where, for the first time, there was participation and assistance from the high level management of institute, which indicated that the work carried out was finally being visualized and recognized, installing the event in an institutional manner. This clearly reflected a paradigm shift, a beginning of the establishment of the entrepreneurial culture, new areas of opportunity and a more integral and quality education for our students. The road was difficult, but it only represents the beginning of a transit that does not end and that must conform to changes and current global conditions.

## 5. Research Group

In short, all of the described and lived above, brought to me, personally, the acquisition of knowledge, skills and abilities that managed to position me in places that gave my life new opportunities. I'm passionate about the area of entrepreneurship, fortunately I am part of the group created from the ATE, where I have participated in different investigations, articles and papers, even if for these I faced several obstacles still belonging to the old paradigms which fail to understand the holistic vision of entrepreneurship and seek to pigeonhole an individual into issues that they consider only belonging to the acquired profession (in my case design, creativity and publicity), when it is precisely the richness of the combination of diversity of areas that sustains theoretical-practical growth of an entrepreneurial culture.

Having a space to generate not only the management of this culture but to theorize about it, to be part of national and international

networks, the opportunity to learn from the people who study the subject, has been an invaluable opportunity. To this day I have coordinated with two coordinators and founder of this ATE two books of entrepreneurship, and another editorial work in process of evaluation, the establishment of a virtual seminar of entrepreneurship, projects in conjunction with the vision to spread and achieve a change, and the road continues. I have discovered that to transcend one has to take risks, dare to go further, blur boundaries and overcome fears, which is not easy but it is extremely enriching, even if this requires an impetus that at times may seem not easy to maintain and which has bothered third parties.

#### 6. Conclusions

In line with Engstrom (2012), it is suggested that the need to penetrate the social experiences of entrepreneurs should be placed in the foreground. Hjorth and Stevart (2004, p.4) comment that "Convincing others - directing desires, organizing resources, facing obstacles - and sharing images of what could become, is done in small narratives with which people can identify". The events and experiences shared in the present period have led to the creation of dialectical processes (Hargrave and van de Ven, 2006), thus catalyzing the possibility of institutional opportunities and innovations (Ruttan and Hayami, 1984). In the end, entrepreneurship is a social fact and addressing it from different perspectives should be a frequent practice, both academically and pedagogically in its teaching. As a result of revisiting the present experience, and through the elaboration of an analytical generalization suggested by Chang (2008) regarding analytic and interpretative autoethnography, it is necessary to point out, a) the importance of better managing the power relations that are generated towards the sine and dynamics of groups or work teams, such as the ATE and; b) design a social and organizational strategy that addressed the profound institutional change that the University had and which would have facilitated the process.

#### 7. References

Allen-Collinson, J. & Hockey, J. (2005). Autoethnography: Self-indulgence or rigorous methodology? En Mike McNamee (Ed.), *Philosophy and the sciences of exercise*, *health and sport: Critical perspectives on research methods* (pp.187-202). London: Routledge.

- Berglund, H. (2007). Researching entrepreneurship as lived experience. En H. Neergaard y J. P. Ulhoi (Eds.), Handbook of qualitative research methods in entrepreneurship (pp. 75-96). Northampton, MA: Edward Elgar.
- Bolívar, A. (1996). Non scholae sed vitae discimus: Límites y problemas de la transversalidad. Revista de Educación, 309, 23-66.
- Caulley, D. N. (2008). Making qualitative research reports less boring: The techniques of writing creative nonfiction. *Qualitative Inquiry*, 14(3), 424-449.
- Chase, S. E. (2011). Narrative inquiry: Still a field in the making. En N. Denzin, y V. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 421-434). Los Angeles: Sage.
- Chang, H. (2008). Autoethnography as Method (Developing Qualitative Inquiry). London: Routledge.
- Cummings, T. y Worley, C. (2007). Desarrollo Organizacional y Cambio. México: Thomson.
- Denzin, N. K., y Lincoln, Y. S. (2000). The discipline and practice of qualitative research. en N. K. Denzin y Y. S. Lincoln (Eds.), Handbook of qualitative research (2nd ed., pp. 1-28). ThousandOaks: Sage.
- Ellis, C., Adams, T., y Bochner, A. (2010). Autoethnography: An Overview. Forum: Qualitative Social Research, 12(1). doi: http://dx.doi.org/10.17169/fqs-12.1.1589
- Engstrom, C. (2012). An autoethnography account of prosaic entrepreneurship. *Tamara Journal for Critical Organization Inquiry*, 10(1).
- Fletcher D.E. (2011). A curiosity for contexts: Entrepreneurship, enactive research and autoethnography. Entrepreneurship & Regional Development, 23(1/2), 65–76.
- Fogel, K., Hawk, A., Morck, R. y Yeung, B. (2006). Institutional Obstacles to Entrepreneurship. En Casson, M., Yeung, B., Basu, A. y Wadeson, N. (eds.), Oxford Handbook of Entrepreneurship. Oxford: Oxford University Press.
- Glave, T. (2005). Words to our now: Imagination and dissent. Minneapolis: University of Minneapolis Press.
- Gottlieb, F. (2015). Researching entrepreneurship with autoethnography. En Pursuing Innovation Leadership: Proceeding of the 16th International CINet Conference. Continuous Innovation Network (CINet).
- Greenhalgh, S. (2001). Under the medical gaze: Facts and fictions of chronic pain. Berkeley: University of California Press.
- Haluza-DeLay, R. (2008). Churches engaging the environment: An autoethnography of obstacles and opportunities. *Human Ecology Review*, 15(1), 71-81.
- Hargrave, T.J., Van de Ven, A.H., 2006. A collective action model of institutionalinnovation. Academy of Management Review, 31, 864–888.
- Hjorth, D., y Steyaert, C. (Eds.). (2004). *Narrative and discursive approaches in entrepreneurship*. Cheltenham: Edward Elgar.
- Hesse-Biber, S. (2010), Qualitative Approaches to Mixed MethodsPractice, en *Qualitative Inquiry*, Thousand Oaks: Sage.
- Ingenieros, J. (2008). El hombre mediocre. Editorial Porrúa, Ciudad de México.
- Kuhn, T. S. (2005). La estructura de las revoluciones científicas. Madrid: Fondo de Cultura Económica.
- Lewin, K. (1951). Field Theory in social science. New York: Harper&Row.

- Macrì D., Tagliaventi M. y Bertolotti F. (2002) Grounded theory for resistance to change in a small organization. *Journal of Organizational Change Management*, 15(3), 292-310.
- McCauley, S. (1996). Let's say. En Patrick Merla (Ed.), Boys like us: Gay writers tell their coming out stories (pp.186-192). New York: Avon.
- Montiel, O. y Rodriguez, C. (2016). ¿Lo volvería a hacer? Liderando un cambio de paradigma. El caso de la Academia Transversal de Emprendimiento. En Ojeda R. y Lopez L. (Coords.) Gestión Social. Organizaciones Humanas Para Una Sociedad Incluyente, Memorias del XX Congreso Anual, available in http://acacia.org.mx/wp-content/uploads/2016/11/EBook\_XX\_Congreso\_ACACIA.pdf, pp. 7975-8001.
- Muncey, T. (2010). Creating autoethnographies. London: Sage.
- Neck, H.M. y Greene, P.G. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. Journal of Small Business Management, 49(1). 55-70.
- OCDE (2012). A Guiding Framework for Entrepreneurial Universities. Available in http://www.oecd.org/site/cfecpr/EC-OECD%20Entrepreneurial%20Universities%20Framework.pdf
- Paz, O. (1959). El laberinto de la soledad. México: FCE.
- Pelias, R. J. (2000). The critical life. Communication Education, 49(3), 220-228.
- Pole, C. y Morrison, M. (2003). Ethnography for education. Maidenhead: Open University Press.
- Rae, D., y Carswell, M. (2000). Using a life-story approach in researching entrepreneurial learning: The development of a conceptual model and its implications in the design of leaning experiences. *Education & Training*, 42, 220-227.
- Richardson, L. (2003), "Writing. A Method of Inquiry", en Denzin, N. y Lincoln, Y. (eds.), Collecting and Interpreting Qualitative Materials. Thousand Oaks: Sage.
- Ruttan, V.W. y Hayami, Y., 1984. Toward a theory of induced institutional innovation. *Journal of Development Studies*, 20, 203–223.
- Schein, E. (1985). Organizational culture and leadership: A dynamic view. Jossey-Bass. USA. Seikkula-Leino, J. (2007). Opetussuunnitelmauudistus ja yrittäjyyskasvatuksen toteuttaminen (Curriculum reform and entrepreneurship education). Helsinki: Opetusministeriön julkaisuja.
- Sperrer, M., Müller, C. y Soos, J. (2016). The Concept of the Entrepreneurial University Applied to Universities of Technology in Austria: Already Reality or a Vision of the Future? *Technology Innovation Management Review*, 6(10), 37-44.
- Starr, L. (2010). The use of autoethnography in educational research: Locating who we are in what we do. Canadian Journal for New Scholars in Education, 3(1), 1-9.
- Trahar, S. (2009). Beyond the story Itself: Narrative inquiry and autoethnography in intercultural research in higher education. *Forum: Qualitative Social Research*, 10(1), Art.30, http://nbn-resolving.de/urn:nbn:de:0114-fqs0901308 [Accesado: 26 de Enero 2016].
- Young, A. (2000) I'm just me: A study of managerial resistance. *Journal of Organizational Change Management*, 13(4), 375-398.

www.retos.ups.edu.ec

# Bakery small business in Azuay (Ecuador) and their productivity

## Microempresas panificadoras en el Azuay (Ecuador) y su productividad

Carlos Armando Romero Galarza is a researcher at the Business Research Group (GIE) at the Faculty of Economics and Administration at the University of Cuenca (Ecuador) (armando.romerog@ucuenca.edu.ec) (http:// orcid.org/0000-0003-1149-4299)

Gustavo Geovvani Flores Sánchez is a researcher at the Business Research Group (GIE) at the Faculty of Economics and Administration at the University of Cuenca (Ecuador) (gustavo.flores@ucuenca.edu.ec) (http:// orcid.org/0000-0003-4123-2644)

Jorge Arturo Campoverde Campoverde is Professor of the University of Cuenca in the Chair of Operations Research and researcher and coordinator of the Business Research Group (GIE) in the Faculty of Economics and Administration of the University of Cuenca (jorge.campoverde@ucuenca.edu.ec) (http://orcid.org/0000-0002-1633-56441

Katherine Tatiana Coronel Pangol is a graduate of the Business Administration and Research Assistant of the Research Group (GIE) at the Faculty of Economics and Administration of the University of Cuenca (Ecuador) (katherine.coronelp95@ucuenca.ec) (http://orcid.org/0000-0003-4370-756X)

#### Abstract

The business sector represents one of the fundamental axes in the economy of a country. It contributes to generate employment; development of the industrial, commercial and services sector. At the same time, the participation of micro, small and medium-sized enterprises is noteworthy due to the large number of organizations in this category. It is important to emphasize in the short life cycle of these companies and the limitations that are present. Through a descriptive and a bivariate analysis, 113 micro-bakeries had been studied in the province of Azuay, which are affiliated to the Ministry of Industries and Productivity (MIPRO) of Region 6. The results show related behaviors between the average productivity per employee of the microenterprises and strategic business management, their productive capacity, their degree of innovation in machinery, the equipment and marketing systems and also on the requirement of additional financing for the growth of business. However, it is considered that it is a sector with limited skilled labor that does not allow an increase in productivity and competitiveness, which is a key factor in business development.

#### Resumen

El sector empresarial representa uno de los ejes fundamentales en la economía de un país, en la generación de empleo y en el desarrollo del sector productivo, comercial y de servicios. Es notoria la participación que tiene la micro, pequeña y mediana empresa debido a la gran cantidad de organizaciones existentes en esta categoría. Cabe recalcar que es preocupante el corto ciclo de vida que mantienen las mismas y las limitantes que éstas mantienen. El estudio presenta un análisis descriptivo y bivariado de 113 microempresas panificadoras en la provincia del Azuay (Ecuador), afiliadas al Ministerio de Industrias y Productividad (MIPRO) de la Zona 6. Los resultados muestran comportamientos relacionados entre el promedio de productividad por empleado que tienen las microempresas y la gestión empresarial estratégica, la capacidad productiva, el grado de innovación en maquinaria, equipo y sistemas de comercialización y sobre el requerimiento de financiamiento adicional para el crecimiento de los negocios. Se considera que es un sector con limitada mano de obra calificada que no le permite un incremento en la productividad y competitividad, factor clave de desarrollo empresarial.

### Keywords | Palabras clave

Microenterprise, productivity, innovation, business management, strategic, financing. Microempresas, productividad, innovación, gestión empresarial, estrategia, financiamiento.

### 1. Introduction

The importance of micro and small enterprises in the national and international economy is indisputable. According to figures released by the INEC - Directory of Companies and Establishments (2014), in Ecuador they represent 97.9% of the total productive organizations.

The manufacturing sector is one of the most important because of the great linkages generated in the value chain, generating employment and innovation. However, other economists who give greater emphasis to stylized facts such as Kuznets (1966) and Rodríguez, Bernal, & Cuervo (2012) have suggested that the structure of chains in an economy is irrelevant from the more orthodox neoclassical point of view. Economic growth is driven by productive linkages between different sizes of companies that occur in the territories.

On the contrary, Latin America, especially Ecuador, is characterized by the presence of a highly polarized and disjointed business reality "... in which highly competitive poles coexist with scattered universes of micro, small and medium-sized enterprises (SMEs) (Cohen & Gabriel, 2012).

Well-managed and healthy SMEs are sources of employment and wealth creation. They contribute to social stability and generate tax revenues. According to the International Finance Corporation (2009) there is a positive relationship between a country's income level and the number of SMEs per 1,000 people. The Doing Business (World Bank Group, 2014) reports that a high SMEs sector corresponds to a reduced level of activity in the informal or black market sector.

On the other hand, in Latin America the impulse to the entrepreneurial activity has become one of its main policies, considering to the microenterprises and the small companies with a representation of 80% of the total of the economy (Hidalgo, Kamiya, & Reyes, 2014). In Ecuador, according to the quarterly labor market report of the Central Bank of Ecuador (2015), it was observed that the majority of entrepreneurs are in establishments with less than 100 Mypimes employees; this percentage stands at 77.4%; while the remaining 22.6% are located in establishments with more than 100 employees; that is, an important role of micro and small enterprises in the Ecuadorian economy is evidenced.

However, according to Cohen & Gabriel (2012), the SMEs have some difficulties, such as restricted access to funding sources, low levels

of training of their human resources, limited levels of innovation and technological development, little penetration in international markets, low levels of productivity, low association and administrative capacity among the most important; factors that limit thier business growth, subtracting its productivity and efficiency in the domestic and international markets.

The objective of the present investigation is to show if the factors referred to above affect the productivity of the employees of the microbakeries with the developed business management and in what form, through the influence of certain relational variables that are part of the organization of the businesses. The relational variables included in the analysis are influenced by certain business management structures, such as strategic and operational, as well as innovation factors and additional financing requirements for the operations of micro-bakeries.

### 2. Theoretical framework

### 2.1. Organizational performance

To understand the concept of organizational performance it is necessary to clarify meanings that can be confused with the one of organizational effectiveness that refers to the fulfillment of proposed objectives and the one of performance of the firm that is constituted in the market value.

According to Dyer & Reeves (1995), organizational performance refers to the measurement and assessment of achievement of organizational goals and are measured through the evaluation of financial results, organizational results and results related to human resources.

Velarde, Araiza, & García (2014) conducted a study in Coahuila, Mexico, in which they tried to determine the relationship between the factors of the company and the entrepreneur with business success, and conclude that only the factor associated with the degree of schooling has a positive relation with the growth in the investment of machinery and equipment, while the other factors of the entrepreneurs have no association with the economic success. On the other hand, the factors of the company - such as legal structure and economic sector in which the company is developed - are related to the success of the company in relation to increase of sales, increase of employees and investment in machinery and equipment.

### 2.2. Innovation

At present, according to Teece, Pisano, & Shuen (1997), growth in organizations and especially manufacturing MIPYMES require, among other options, to strengthen their innovative activity and for this, they require a greater competitiveness. Lochon (2014) considers in his research that innovative activity must have an influence on companies in such a way that it must be reflected in the business results and in the gradual increase of its competitiveness.

An analysis model widely recognized in the literature assumes that the realization of innovations by companies is influenced by a set of variables, which can be grouped basically in three large blocks as described by Hoffman, Parejo, Bessant, & Perren (1998), including: (i) extra-organizational factors, in particular associated with the characteristics of the sector to which the company belongs; (ii) those related to the characteristics of the members of the organization, especially managers; (iii) those related to the organization itself, for example strategic orientation or financial structure.

According to Etzkowitz & Leydesdorff (2000), innovation has become one of the key elements within a company. It transcends all areas such as production, finance, planning, human resource management and marketing. However, in the small business many of these functions are carried out directly by the owner or by the person who runs several jobs.

Small companies have enormous innovation advantages over large companies, such as their business dynamism, their internal flexibility and their capacity to respond to changing circumstances. In addition, their size gives them dynamism, internal flexibility, short delivery times of products and capacity to respond to change, although they may encounter barriers such as:

- Lack of specialists and qualified staff within small businesses.
- Lack of time and resources to identify and use external sources of information, techniques and scientific knowledge.
- Difficulties in attracting capital, especially venture capital.
- Inability of small business to distribute risk through a portfolio of projects due to limited resources.

However, Vossen (1998) states that a certain current of literature considers that there are differences between large and small companies.

This justifies that the innovative activity of the latter is more internally developed and is mainly linked to the figure of the entrepreneur and the taking of certain business strategies. Some studies suggest that small firms tend to be more successful in industries where the weight of personal skills and abilities are more important, while others argue that small business strengths do not reside in resources but in characteristics such as flexibility, business culture and staff motivation.

Several authors point out the importance of investing in innovation to increase the level of sales in micro and small companies. For example, Benavente (2005) found that increased R & D spending, by research in the sciences and technological development, is positively related to the increasing importance of sales of innovative products on the total sales of the company.

Analyzing a sample of Chilean manufacturing companies, Griliches (1979) presents as a result of his research a positive relationship between R & D expenditures and increased productivity. The link between investment in innovation is also evidenced by Crépon et al. (1988) and Kemp et al. (2003). However, it is important to note that there is studies that indicate that there is no consistent relationship between the same variables (Lööf, Heshmati, Asplund, & Naas, 2001).

Likewise, Córdova & Naranjo (2017) state that small companies with a lower level of technology make a greater effort in Science Technology and Research activities, which is not reflected in innovative sales, while companies with a higher level of technology outperform in sales to the previous ones.

On the other hand Fairlie (2007) sought to determine if there is a statistical relationship between business innovation and value added generation, where comparisons made in general showed that 82% of SMEs that have applied some type of innovation in their company in the last two years have increased their sales in relation to their competitors, while those that did not inovate had a sales increase of 27%. The differences in sales between companies of the same category with respect to those that innovate constantly is significant.

#### 2.3. SMEs Performance

Considering that management designs the structure on which the business control function is supported, for Solís (2005), the design of

control systems must offer a feedback in a timely and cheap manner that is acceptable to the members of the organization. From this, it can be affirmed that the control system based on the structure of the organization develops the activities of the business, under clear and defined policies aimed at preserving the common purpose.

Management has as its fundamental functions the planning, organization, direction and control. The coherence and cohesion between them produces an efficient, economic and effective administration of the resources that it uses for the achievement of the planned goals and objectives. In this sense, the functions of the administration are defined to focus the analysis on the control and its relation with the business risks. Figure 1 shows the process that follows the development of functions within the management.

**Processes Operations** Activities **OBJETIVES AND GOALS APPROACH** (means and resources) Adjustments **ORGANIZATION** Results **Politics** Functions Systems and procedures measurement Information DIRECTION and evaluation CONTROL

Figure 1. Functions of management

Source: Dextre (2010)

### 3. Materials and method

## 3.1. Type of research

The research is experimental, since it focuses on the implementation of knowledge for the search of social benefit, through the use and study of variables that will allow understanding the behavior of the sector.

#### 3.2. Research Method

The research method applied is hypothetic-deductive, because it allows demonstrations based on hypotheses or research questions; in turn also the logic-deductive method was used, because it admits to consider population samples for the estimation of results since the elements of the investigation could not be studied in their entirety.

### 3.3. Sample

In order to determine the sample, it was considered as a study population the micro and small companies of the baking sector registered in the database of the Ministry of Industries and Productivity (MIPRO) in the province of Azuay (Ecuador) from January 2015 to March 2016, considering a total of 137 bakeries; so the information was collected in a census manner.

Of the 137 bakeries, 113 were surveyed, representing 82.5% of the population. Of the remaining 17.5%, i.e. 24 businesses, no response was obtained for various reasons: 2.92% sold the business, 1.46% went on vacation, 10.20% were not located due to that both the address and the phone were wrong, 0.73% does not authorize, 1.46% does not collaborate, and 0.73% change of business.

Chart 1 shows how the sample margin of error was determined to be able to be inferred in the entire resulting population, obtaining a +/- 3.88 margin sufficient to infer in the entire study population.

Description	Value
Confidence level	95%
Population	137
Sample error margin	+/- 3,88
Sample	113

**Chart 1. Sample Statistical Parameters** 

### 3.4. Sources of information

The information gathered for the elaboration of the research was obtained by means of primary information applying surveys to each one of the micro-enterprises of the sector under study. Secondary information was also obtained that was based on the review of bibliography of interest. Finally, information was obtained from tertiary sources that

provided information at the macroeconomic level of the study sector, such as the National Institute of Statistics and Censuses (INEC).

## 3.5. Methodological procedure and tools

The process carried out in the study began with the obtaining of the database of micro and small companies to be investigated. Subsequently we proceeded with the collection of data in primary sources; the tools for data collection and analysis were developed, such as instrument-survey and templates for generation of databases, which were put to the test in an exploratory pilot analysis that served to validate and guarantee the reliability of the same.

The surveys were applied directly to each of the owners and/or managers of the companies, which guarantee the accuracy of the data. Once the survey was completed, the information was filled out and the data entered into the analysis software templates.

Once digitized, the data of the surveys was processed in the statistical software IBM SPSS® v. 20.0, through an analysis of univariate statistical information (frequencies and percentages) of the main study variables. This allowed characterizing the bakery sector in the province of Azuay, investigating its opportunities and weaknesses. In addition, a bivariate analysis was performed to compare the differences between the means of more than two populations. For this purpose, ANOVA was used to determine and compare the means of productivity per employee of microenterprises with relevant factors of business management that affect their manufacturing operation.

## 3.6. Data and variables description

To evaluate the micro-bakeries, a set of variables considered according to the sector's reality was established. These allowed an overview of the situation. The defined variables were:

- Dependent variable: the employee's average productivity, measured by the monthly turnover divided by the number of employees working in the micro-bakeries.
- Independent variables:
  - $\sqrt{\phantom{a}}$  Business Management: defined its mission.
  - √ Business Management: defined its vision.

- $\sqrt{}$  Business Management: defined its organization chart.
- √ Business Management: defined the internal policies of the company.
- √ Productive Capacity: number of units/day produced.
- √ Change or improvement in the processes, products or management systems in the last 2 years.
- √ Innovation: Acquisition of technology incorporated into machinery and equipment.
- √ Innovation made: Incorporated improvement of marketing systems.
- √ Additional financing during the time it takes to generate activities.

### 3.7. Average Employee Productivity

Job performance is the way employees do their jobs. This is evaluated during performance reviews, by analyzing factors such as leadership capacity, time management, organizational skills and productivity to analyze each employee individually (Economic Commission for Latin America and the Caribbean - ECLAC, 2001).

Job performance reviews are usually conducted monthly or annually and can determine whether an employee's eligibility is raised, whether he is eligible for promotion or even if he should be fired. Therefore, performance is linked to employee productivity, which is measured by the ratio of a company's turnover to the number of employees it has. The number of employees, on the other hand, is a variable that also indicates the size of the companies (Bonilla & Mayorga, 2011).

Employee productivity is a result of work performance, which is the relationship between objectives, goals or tasks achieved and the time it has taken to achieve it. This calculation has to be made taking into account that time refers to quality hours worked and that the most important variable are the people in charge of performing the functions of the job (Rodriguez & Gomez, 2011).

## 3.8. Sales and general productivity

According to Salazar (2015), the average number of sales generated by employees is a good measure of productivity, since it helps determine how much sales must increase to justify hiring an additional employee; therefore to obtain an average of employee productivity, the following equation is derived:

Average Employee Productivity = 
$$\frac{Net \ sales}{Number \ of \ employees}$$

The average employee productivity describes how much sales should increase to consider the cost of hiring a new staff member in the company. Evaluating the performance or productivity of employees can provide numerous benefits to the organization. It also allows you to distribute compensation incentives fairly. Employee performance appraisals can increase staff operational efficiency and productivity, while identifying high-performance candidates for future business promotion (Maldonado-Guzmán et al., 2011).

Chart 2 also shows the descriptive statistics of the variable of interest, which is the average of the productivity of the employees/month of the micro-bakeries, whose value is USD 683.28

**Chart 2. Descriptive Statistics** 

Variable	No.	Minimum	Maximum	Mean	Median	Typical. dev
Productivity by employees	113	20	2,400	683,28	500	536,48

Note: Elaborated by the SPSS® software v.20.0

## 4. Description of the sector

In Ecuador there are 6,879 active companies dedicated to the production of bakery products, according to the qualifier of economic activities CIIU4 - C1071. Of this total, within the province of Azuay there are a total of 621 companies, of which 83.89% are in Cuenca. In turn, micro and small enterprises represent 67.99% of all Ecuadorian companies (INEC 2015, Redatam). Their participation in different scenarios is very heterogeneous, being the most important in the generation of employment, less important in production and very small in exports.

The greater participation in employment, compared to production, indicates low relative levels of productivity. Its low participation in exports shows its strong orientation to the domestic market and its dependence on the dynamics of domestic demand. Therefore, its production is very determined by the evolution of employment and wages in the economy as a whole, contributing with 0.28% of formal employ-

ment according to data (INEC 2015). Chart 3 shows the growth of the sector in its sales level.

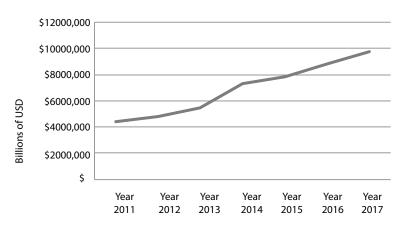
Chart 3. Percentage variation in annual sales

Period	Sales (billions of USD)	Sales variation
Year 2011	\$ 4 430,54	0,00%
Year 2012	\$ 4 821,58	8,83%
Year 2013	\$ 5 462,98	13,30%
Year 2014	\$ 7 340,94	34,38%
Year 2015	\$ 7 856,61	7,02%
Year 2016	\$ 8 794,00	11,93%
Year 2017	\$ 9 731,15	10,66%
Average	\$ 6 919,68	14,35%

Source: Own elaboration with INEC data (2011 - 2015)

In the period 2011-2017, the bakery sector has shown a constant growth, which reaches an average of approximately 14.35%. Figure 2 shows the growth trend that has had the level of sales of the sector, being considered an item with significant growth in the economy of Ecuador. Sales for 2016 and 2017 were forecasted.

Figure 2. Annual sales bakery sector



Source: Own elaboration with INEC data (2011 - 2015)

## 5. Analysis and results

The results obtained through the descriptive analysis of the 113 applied surveys indicate that 90% of respondents are qualified as artisans affiliated with MIPRO, while 10% belong to the Craftsman's Board. Of these, 89% do not have the obligation to keep accounting since they are qualified under the Régimen Impositivo Simplificado Ecuatoriano (Simplified Ecuadorian Tax Regimen) (RISE) modality and only 11% has the obligation to keep accounting.

Considering the years of the activity of the companies, we determined that 44% maintain their activities between 1 and 5 years; 24% have between 5 and 10 years of dedication; 13% between 10 and 15 years, and 19% have been working for more than 15 years.

In Figure 3, it can be observed with clarity that around 20% of the businesses surveyed have 1 employee, 51% of them have 2 employees, 17% have 3 employees, 11% of businesses have 4 employees, and only 2% have more than 5 employees; evidencing that 99% of the companies by their characteristic are microenterprises.

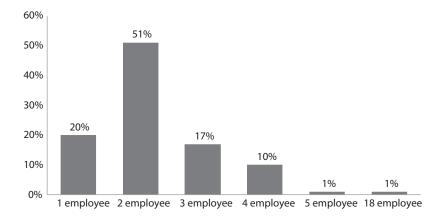


Figure 3. Number of employees of the bakery companies

As for the market of destination of its sales, it is observed that 96% of its turnover is concentrated in the city of Cuenca and 4% it is carried out in cantons and nearby provinces. On the other hand, in terms of turnover, 93% of micro-enterprises produce bread and pastry, while 7% produce only pastry products.

The average monthly turnover of the 113 businesses shows an average monthly income of \$ 1,708.32. In addition it is evident that there are on average 5 premises of the same economic activity in a radius of 5 blocks, considering it as a business with many competitors.

It is observed that employees of micro-enterprises have, on average, 8 years of schooling; 43% of employees have primary education, 51% of employees have secondary education, 5% have a university education and the remaining 1% have a postgraduate level.

It is also worth noting that 58% of businesses have received training, and 59% of the micro-enterprises that have received training have done so in such areas as administrative management and billing, 24% in supplier management and one 12% in sales and customer service, as shown in figure 4.

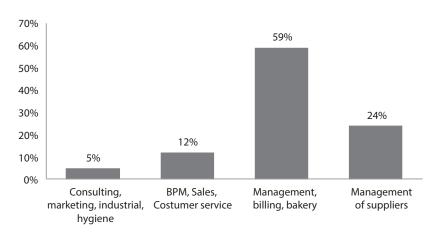


Figure 4. Training areas received by the employees of the bakery companies

On the other hand, it is established that during the time that the businesses are operating, only 43% of the companies have requested additional financing to continue their operations, with their average financing amount of \$ 12,885.45. Figure 5 shows the reason why they require additional financing; 52% have used machinery, 30% for the physical expansion of the business and 24% for the acquisition of working capital as the raw material, among the most important.

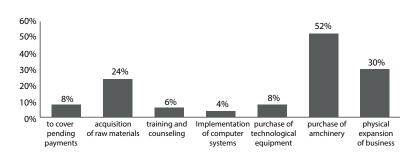


Figure 5. Reason for which additional funding was required

With regard to technology, machinery and the degree of automation of micro-enterprises, 47% of the businesses have manual action, meaning that bread and its products are handcrafted, while 47% have a semi-automatic action and only 6% of businesses have an automatic degree. 94% of companies do not have software for their processes or management.

When examining the relationship between products and processes, defined by the type of productive process available to microenterprises, 71% do so on a continuous basis for sale, 19% produce for stock and only 10% made under request. In addition, 70% of microenterprises have a productive capacity of more than 61%, producing an average of 658 units per day.

At the same time, 91% of the baking companies project their production daily and only 9% do it weekly. Similarly, businesses manufacture a mix of products, which means that 81% of micro-enterprises produce on average between 1 and 5 products, and 19% produce more than 6 products.

With respect to the quality system that the businesses have, it can be seen that 92% of micro-enterprises carry out quality controls on their finished products, mainly using the method of visual inspection. On the other hand, only 50% of the companies carry out quality controls in the production processes; In addition, 95% of companies do not have quality control records. Similarly, 70% of companies have a maintenance plan for their machinery and equipment, performing a 46% corrective maintenance and 54% preventive maintenance.

As far as customer knowledge and tastes are concerned, 95% of companies claim to know the taste of consumers, and 80% know the buying habits of their customers. On the other hand, only 43% identify the products and prices of their competition; 26% provide after-sales services and 85% offer warranty on their products to their customers.

If we analyze the origin and supply of the raw material, we can see that 90% of the companies are supplied mainly at national level, acquiring from wholesale distributors. In addition, 50% of micro-enterprises qualify their suppliers and 87% consider that provisioning or delivery is timely. Likewise, 90% of companies state that the credit granted by their suppliers is on average from 1 to 30 days.

Concerning the organization and business management, it is observed that 92% of the bakeries do not have a documented strategic management. On the other hand, 78% of micro-enterprises do not carry general accounting or cost accounting; important factors for business decision making. Similarly, 80% of companies do not use financial planning as a sales, purchasing, production and cash flow budget for business operations.

They were also questioned about the main constraints that microenterprises have for business growth and, according to figure 6, 39% stated that the lack of financing was,30% the level of competition in the sector and 13% taxes, among the most relevant.

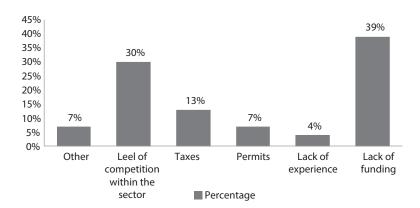


Figure 6. Main constraints to the growth of the company

Likewise, with respect to the perception in management of innovation and development by companies, 94% believe that innovation is important and very important for the development and growth of companies. Even 62% of businesses say they have made changes to their products, processes or management systems in the last 2 years. In the same way, 86% of the companies have made innovation in the improvement of the products; 82% in process improvement, 51% have developed new products and lastly, 46% of businesses have implemented environmental standards and the application of clean technologies in their production processes.

Subsequently, we analyze the tools and equipment available to micro-enterprises, which shows that 78% of them use stainless steel work tables, 43% use automatic oven, 53% use manual oven, 81% has a blender, and 59% uses semi-automatic kneader, among the most important baker equipment.

In relation to the bivariate analysis, a one-way ANOVA analysis (also called one-way ANOVA or one-way ANOVA) is performed, being a statistical technique that establishes whether two variables (one independent and one dependent) are related based on that if the means of the dependent variable are different in the categories or groups of the independent variable. That is, it points out whether the means between two or more groups are similar or different.

For this purpose, Chart 4 shows the contrast results of the ANOVA analysis of the mean of the variable of interest, which is the employee productivity of the micro-bakeries and the means of the two independent samples or factors concerning strategic business management, business operation, innovation applications and additional funding requirements. This analysis was generated individually between each independent variable with the dependent variable.

Chart 4. One-Way ANOVA Analysis - Employee Performance / Independent Variables

Independent variables (factor)		N	Performance F	
Business Management: mission.	Yes	11	*** 5,123	
Dusiness Management. Mission.	No	102	5,125	
Business Management: vision.	Yes	10	*** 4,661	
Dusiness Management. Vision.	No	103	4,001	
Business Management: organization chart.	Yes	7	*** 5,247	
business Management. Organization chart.	No	106	5,247	
Business Management: internal policies of	Yes	8	*** 10,536	
the company.	No	105	10,556	
Productive Capacity: number of units produ-	<= 658	73	*** 15,270	
ced per day.	> 659	40		
Has made some change or improvement in its processes, products or management	Yes	71	** 3,857	
systems in the last 2 years.	No	42		
Indicate in which has made innovation: Acquisition of technology incorporated into	Yes	17	** 3,839	
machinery and equipment.	No	96	.,	
Indicate in which has made innovation:	Yes	27	** 4,591	
Improvement of marketing systems.	No	86		
It has required additional funding during the	Yes	49	** 4,562	
time it has been generating activities.	No	63		

Note: significance \*\*\* 1%; \*\* 5%; \* 10%

As shown in Chart 4, those microenterprises that have developed and implemented their strategic business management with tools such as vision, mission, organizational chart and internal management policies of the company, have a significant correlation with the average employee productivity; that is to say that those who have managed to deploy a business strategy in the organization have an average superior of productivity per employee in comparison to those that have not developed it.

Consequently, it is significant evidence that those microenterprises that have implemented business management have an average increase in productivity per employee between USD 583.29 and USD 783.28.

On the other hand, when analyzing the production capacity of the microenterprises through the daily units produced, a negative correlation with the average productivity of the bakery business is evident; that is to say that those micro-enterprises that produce on average more than 659 units per day have an average monthly productivity per employee of USD 934.20 compared to USD 545.79 of those that produce less than 658 units per day.

Likewise, micro-enterprises that have made changes or improvements in their products, processes or management systems in the last 2 years in the acquisition of technology incorporated in machinery or equipment and in marketing improvement show a significant average productivity per month per employee ranging from USD 587 to USD 895.

Likewise, microenterprises that have required additional financing during the time they are generating activities have a significant average productivity-month per employee, ranging from USD 633 to USD 977, compared to those that did not require additional funding. This has a direct relationship since the resource that the company acquires is invested in the purchase of machinery and physical expansion of the business, allowing a greater use of the performance of its resources in micro-bakeries.

#### 6. Conclusions

It can be seen that micro-bakeries have limited competitiveness in internal factors of their own operation, such as weak administrative management, problems with the market, production and financing, which are elements that make management difficult and prevent business growth.

On the other hand, the productive capacity measured by the units produced per day, is a factor that affects the productivity per employee, reason why it is increased considerably if the microenterprises produce more than 659 units. This is linked to the productive capacity of microbakeries that on average has 70%, so it is evident that micro-enterprises can produce more units per day.

Another factor related to employee productivity in Azuay's micro-bakeries is related to changes or improvements in processes,

products or management systems in the last 2 years, especially in the acquisition of technology incorporated in machinery and equipment, and in the improvement of marketing systems.

In addition, it is observed that the employees of the micro-bakeries have, on average, 8 years of education, and studies have shown that the higher the level of education of their employees, the higher the productivity in the company; so that micro-bakeries have a low level of productivity.

As can be seen in the characterization of micro-bakeries in Azuay, due to its organizational structure, tax regulations and restricted strategic business management, it has a high limitation for sustained growth over time.

Finally, these factors contribute to the fact that most microenterprises are considered subsistence businesses because they do not have operational controls for a correct and timely administrative management. In addition, having unskilled labor restricts the development of innovative processes, products or management systems. The lack of training of personnel in important areas and the low level of technification of machinery leaves productivity to make businesses profitable and bring greater benefits to the country's economy.

#### 7. References

- Benavente, J. (2005). Investigación y desarrollo, innovación y productividad: un análisis econométrico a nivel de la firma. Estudios de Economía, 32(1), 39-67.
- Bonilla, Y. M., & Mayorga, J. Z. (2011). Medición de la productividad por el método del valor agregado (MPVA) a las Pymes de familia del sector industria de la ciudad de BOGOTÁ D.C Medición de la productividad por el método del valor agregado (MPVA) a las Pymes de familia del sector industrial. Bogotá, Colombia.
- Centro de Comercio Internacional. (2003). Forum de Comercio Internacional. Available in http://www.forumdecomercio.org/La-medici%C3%B3n-del-ren-dimiento/
- Centro Europeo de Empresas e Innovación. (2012). Centro Europeo de Empresas e Innovación. Available in http://www.ceeicr.es/innovacion/innovacion-empresarial/
- Cohen, M., & Gabriel, B. (2012). La situación de las PyMEs en América Latina.
- Comisión Económica para América Latina y el Caribe. (2001). Elementos de Competitividad Sistemica de las PYMEs del Istmo Centroamericano. Naciones Unidas CEPAL, LC/MEX(L.499), 1–54.
- Córdova, J., & Naranjo, J. (Abril de 2017). Incidencia de la Inversión en Innovación en las Ventas de Productos Innovadores. Evidencia Empírica en Empresas Manufacureras de Colombia. Información Tecnológica, 28(2), 153-164.

- Crépon, B., Duguet, E., & Mairessec, J. (1998). Research, innovation and productivity: an econometric analysis at the firm level. Economics of Innovation and New Technology.
- Dyer, L., & Reeves, T. (1995). Human Resource Strategies and Firm Performance: What Do We Know and Where Do We Need to Go? Center for Advanced Human Resource Studies, 1-17.
- Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university–industry–government relations. Research Policy, 29(2), 109–123. https://doi.org/10.1016/S0048-7333(99)00055-4
- Fairlie, E. (2007). Generación de Valor Agregado en las Pymes a travès de la Innovación Empresarial. Gestión en el tercer milenio. Revista de Investigación de la Facultad de Ciencias Administrativas, Universidad Nacional Mayor San Marcos, 23-27.
- Griliches, Z. (1979). Issues in assessing the contribution and development of research to productivity growth. The Bell Journal of Economics, 10(1), 92–116. https://doi.org/10.2307/3003321
- Hidalgo, G., Kamiya, M., & Reyes, M. (2014). Emprendimientos dinámicos en América Latina (No. N°16 / 2014). Venezuela.
- Hoffman, K., Parejo, M., Bessant, J., & Perren, L. (1998). Small firms, R&D, technology and innovation in the UK: a literature review. Technovation, 18(1), 39–55. https://doi.org/10.1016/S0166-4972(97)00102-8
- Kuznets, S. S. (1966). Modern economic growth: rate, structure, and spread.
- Lochon, F. (2014). El salto productivo a la tecnología.
- Lööf, H., Heshmati, A., Asplund, R., & Naas, S. (2001). Innovation and performance in manufacturing industries: a comparison of the Nordic countries. EconStor, SSE/EFI working paper series in economics and finance(457).
- Maldonado Guzmán, G., Martínez Serna, M. del C., Hernández Castorena, O., & García Pérez de Lema, D. (2011). El impacto de los procesos de producción en el rendimiento de la pyme manufacturera de México: Un estudio empírico. TEC Empresarial, 5(1), 21–30.
- Rodriguez, F. X., & Gomez, L. (2011). Indicadores de calidad y productividad en las empresas. New York.
- Rodríguez, L. A., Bernal, M. E., & Cuervo, L. M. (2012). Teoría y práctica del desarrollo económico local.
- Salazar, C. A. (2015). La Productividad y Competitividad en las PYMES. Quito Ecuador.
- Solís, L. (2005). Procesos de negocios de Pymes insertas en redes colaborativas SMSB negotiating processes inserted into collaborative. ADMINISTRACIÓN DE OPERACIONES.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533. https://doi. org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

- Velarde, E., Araiza, Z., & García, A. (2014). Factores de la empresa y del empresario y su relación con el éxito económico en la PYMES de la región centro de Coahuila, en México. Revista Internacional de Administración y Finanzas, 7(5), 11-23.
- Villegas, C. A. S. (2015). La Productividad y Competitividad en las PYMES. Quito Ecuador.
- Vossen, R. W. (1998). Relative strengths and weaknesses of small firms in innovation. International Small Business Journal, 16(3), 88–95.
- World Bank Group. (2014). Doing Business 2014 Measuring Regulatory Quality and Efficiency. https://doi.org/10.1596/978-1-4648-0667-4



www.retos.ups.edu.ed

# Corporate Social Responsibility in the inclusion of people with Disability. Case Study Ambato Companies, Ecuador

Mejores Prácticas Empresariales de Responsabilidad Social en la inclusión de personas con discapacidad. Estudio de caso en empresas de Ambato, Ecuador

Fanny Paulina Pico Barrionuevo is Professor and Researcher in the career of Social Work of the Technical University of Ambato (Ecuador) (paulinapico@hotmail.com) (http://orcid.org/0000-0002-2276-8198)

Silvia Susana Torres is Professor and Researcher in the career of Social Work of the Technical University of Ambato (Ecuador) (stcvita@yahoo.com) (http://orcid.org/0000-0002-6824-8518)

#### **Abstract**

The inclusion of persons with disabilities (PwD), in the field of labor still has flaws that should be corrected, considering that this group has been the exclusion of some form, the business sector of the labor market, a key actor in the realization of a true inclusion, either by legal compliance or by making corporate social responsibility, the labor inclusion should be a fundamental part of each company. The aim of this work is to identify the reality of companies in the labor market inclusion of persons with disabilities, to the effect applies a methodology of qualitative-quantitative research on the basis of a revised theoretical framework to then identify ratings to gather evidence and make a judgment of value to the investigation, applies the type of simple random probability sample through which each element of the population has an equal chance of being chosen, the research is performed through a set of four dimensions: Planning, inclusion, equity and development. Of the 80 companies surveyed the 11.70% correspond to those that perform the best business practices, it also highlights the Commercial Sector in the areas of: inclusion, equity and development. The axis of development is the one that has a lower percentage should be considered to improve the processes that include it.

#### Resumen

La inclusión de las Personas con Discapacidad (PwD) en el ámbito laboral aún tiene falencias que se debe ir corrigiendo, considerando que este grupo ha sentido la exclusión laboral de alguna u otra forma. El sector empresarial, protagonista principal del mercado laboral y actor fundamental en la realización de una verdadera inclusión, ya sea por cumplimiento de normativas legales establecidas o a su vez por realizar Responsabilidad Social Empresarial, tiene en sus manos la inclusión laboral de personas con esta condición. El objetivo del presente trabajo es identificar la realidad de las empresas en la inclusión laboral de las personas con discapacidad. Para el efecto se aplica un diseño metodológico de tipo cuali-cuantitativo en base a un marco teórico revisado para luego identificar valoraciones que permitan reunir evidencias y emitir un juicio de valor en la investigación. Se aplica el tipo de muestra probabilística aleatoria simple a través de la cual cada elemento de la población tiene la misma oportunidad de ser elegida. La investigación se realiza a través de una encuesta establecida de cuatro dimensiones: i) planificación; ii) inclusión; iii) equidad y; iv) desarrollo. De las 80 empresas encuestadas, el 11,70% corresponden a aquellas que realizan las mejores prácticas empresariales. También destaca el sector comercial en los ejes de inclusión, equidad y desarrollo. El eje de desarrollo es el que tiene menor porcentaje, por lo que se le debe considerar con mayor interés para mejorar los procesos de inclusión de PwD.

### Keywords | Palabras clave

Social responsibility, private enterprises, disabled persons, vulnerable groups, labour, disabilities Responsabilidad Social, Empresa Privada, Impedido, Grupo Desfavorecido, Trabajo, Incapacidad

### 1. Introduction and state of the issue

At present, mechanisms have been established for the inclusion of persons with disabilities in the business sector. However there are several reasons why this vulnerable group has not been able to have a total insertion in each of the companies. For this reason, the present research tries to identify the reality of the companies with respect to the labor inclusion of people with disabilities. In the country, the Organic Law on Disabilities has been put into effect, which states in its article 47 on the compulsory recruitment of persons with disabilities:

Article 47.- Labor Inclusion.- The public or private employer who has a minimum number of twenty-five (25) workers is obliged to hire a minimum of four percent (4%) of persons with disabilities, in permanent jobs that are considered appropriate in relation to their knowledge, physical conditions and individual skills, seeking the principles of gender equity and diversity of disabilities. The percentage of labor inclusion should be equitably distributed in the provinces of the country, in the case of national employers; and to the cantons, in the case of provincial employers (National Assembly Republic of Ecuador, 2012).

In this context, there is an obligation to hire people with disabilities. On the other hand, the Organic Disability Law, establishes in article 49 the deduction of an additional 150% for the calculation of the taxable income tax, providing an incentive to the private company in the recruitment of Persons with Disabilities (PwD). It should be pointed out that there is some lack of knowledge about this incentive in private companies, since there is an apparent lack of apathy in the reality of the inclusion of PwD.

## 1.1. Corporate Social Responsibility (CSR)

There are several discussions about the company's actions regarding social responsibility. However, it should be clarified that every individual who works in an organization has ethics and a sense of responsibility, which is projected in the organization (Inter-American Development Bank, 2011).

In Spain, the issues of corporate social responsibility in the field of inclusion of people with disabilities are analyzed in depth. In the case of people with intellectual disabilities, they carry out the inclusion through current legislation and jointly with the practice of Corporate Social Responsibility, which has to do with the integration of people with disabilities or the equality of people (Blanco Prieto, 2015).

The term disability has several definitions. One of them, expressed in the Convention on the Rights of Persons with Disabilities 2006 (as quoted in the Ministry of Labor Relations - CONADIS, 2013) states that: (a) "Disability is an evolving concept resulting from interaction between people with disabilities and barriers due to attitude and environment that prevent their full and effective participation in society, on an equal basis with others."

In the province of Tungurahua there are 2,158 people with work-related disabilities, 55.46% of whom are physically disabled (CONADIS - Ecuadorean Social Security Institute IESS, 2016).

## 1.2. Disability and job inclusion

People with disabilities have less participation in the labor market, even with fewer options those with a significant disability. In this sense there are agencies and institutions that somehow form a channel between people with disabilities and private companies to achieve their insertion in the workplace. In Spain, for example, there are Special Employment Centers (CEC), which are the main route of integration of people with disabilities. The main objective of these centers is to reduce the unemployment and inactivity of workers with disabilities (Rodríguez & Cueto, 2013).

In other latitudes, in Paraguay, private institutions have in their history some form of employment relationship with persons with disabilities, and social responsibility and the initiative of different governmental and non-governmental entities emphasize work as a right (Reyes Giménez, 2015)

In Ecuador on this issue of disability in the workplace, we analyze two aspects that have to do with the limited insertion in the labor market. First, with the vulnerable group (PwD) who have a low level of education, because there are communication barriers, the physical environment and information, which prevent the formation and training of this vulnerable group (National Council for Equality of Disabilities CONADIS, 2013). On the other hand, there is the business sector, which is resistant to hiring people with disabilities due to the long process of labor integration, considering the adaptation of the employee, employer and work team, which also influences the lack of

action measures (selection of test and selection material, assessment of knowledge, skills, abilities and skills). According to the requirements of each disability and some form of irregularities occurring before the compliance with the Labor Code Reformatory Law (Law of quotas that establishes 4%).

Continuing in the same context, in Ecuador a legal framework has been established for the public or private employer that favors the insertion of the PwD. Thus, article 42, number 33 of the Labor Code states that:

(...) the public or private employer, with a minimum of twenty-five workers, is obliged to employ at least one person with a disability in permanent work deemed appropriate in relation to their knowledge, physical condition and skills principles of gender equity and diversity of disability. As of 2009, the mandatory percentage of hiring people with disabilities is 4% of the total number of workers in each company or employer natural person.

## 2. Basis and purpose of the study

Whether the company wants to carry out an application of Corporate Social Responsibility through good business practices in the inclusion of people with disabilities, it is important to identify how the group of PwD has entered the corporate workplace and how the employer acts. Considering that legal regulations and best practices have already been established in Ecuador for the inclusion of persons with disabilities, so as to establish a socio-labor relationship between these two actors, and consequently the need for an initial diagnostic-exploratory investigation, verifying the study variables, through dimensions that include criteria such as equity and inclusion that are essential elements for the attention to the population with disabilities. In this sense, the research is based on the following paradigms:

Chart 1. Paradigms on equity and social inclusion in the labor market

	Liberal	Marxist	Posestructuralist
Equity	Generation of equality or equal opportunities	It overcomes the social, political and economic conditions that produce domination	Recognition and empower- ment of multiculturalism (this is based more on difference than on opportunity)

	Liberal	Marxist	Posestructuralist
	Minorities as objects of a policy that provides differential treatment, generally focused	The cultural differences of minorities are recognized; these are explained from the model of social disadvantage.	Minorities as subjects involved in the construction of the policy
	Diversity oriented towards assimilation and individualism	Diversity oriented to generate against the hegemonic groups in the social, cultural and political	Diversity oriented to dialogue and intercultural integration, identification and consensus dissents
Inclussion	Compensate for the inequalities with which students en- ter school. Individual measures focusing on proposals for specific curricular adaptations or com- pensatory programs	Develop educatio- nal processes in social and economic programs, where the entire educational community strives to reduce the origins of inequality and exclusion, which is generally located outside of school	It is an attitude a system of values and beliefs, not an action or set of actions. It implies recognizing some exercises of power, some languages, relationships to deconstruct and redirect. It demands to offer a proposal of action that prevents the transformation of the differences in symbol of marginalization.

Source: Taken from Díaz, O.C (1) Equidad, inclusión y discapacidad. CD Memorias II Foro Distrital de Discapacidad, Bogotá, 2005. Cited in (García Ruiz & Fernández Moreno, 2005)

The social inclusion responses require political proposals in which all subjects are recognized as protagonists and will depend on the subject's interest in each of the scenarios, such as education or work (Garcia-Ruiz & Fernández-Moreno, 2005)

At the time of induction, it should be 100% inclusive and adequate to the specific needs of people with disabilities. If it is necessary to have a sign language interpreter - for example - it will be necessary to do so in this way (Ministry of Labor Relations - Directorate of Attention to Priority Groups - Conadis, 2013).

In Ecuador, the Ministry of Economic and Social Inclusion, according to Ministerial Agreement No. 000154, article 3 establishes the management of the principles of equality, inclusion, equity, universality and integrality (Ministry of Economic and Social Inclusion, 2013), which are considered in the application of different valuation tools for the application of processes in the workplace and that have to do with the PwD.

### 3. Materials and method

The general objective of this paper is to identify the reality of companies in the labor inclusion of people with disabilities. To carry out the research, the quantitative method was applied, which is based on the measurement of the characteristics of social phenomena that derived from a conceptual framework appropriate to the studied issue (Bernal, 2010). Considering the criteria established in the questionnaire will determine values that will allow to make value judgments according to the presented results.

Also the qualitative method or non-traditional method will be applied, where it is tried to understand the different types of social situations as a whole, considering their properties and their dynamics (Bernal, 2010).

The group analyzed will be the business sector and people with disabilities in the city of Ambato (Tungurahua, Ecuador). A simple random probabilistic sample was applied through which each element of the population has the same opportunity to be chosen, and where the probability of selecting any particular member of the population the first time is 1/N (Berenson, Levine, & Krehbiel, 2001), such that N=160 and n=80. The list of companies was provided by the Cuesta Holguin Foundation.

The participating companies are developed in the private sector and are involved in different sectoral activities. A survey was applied to 80 of them, as extracted in chart 2:

Sector Activity	%		
Industrial Sector	28,57		
Commercial sector	25,97		
Service sector	45,45		

Chart 2. Participating companies by Sector

For the accomplishment of the work, a survey was applied through four dimensions: i) planning; (ii) inclusion; (iii) equity and; (iv) development. Each axis consists of detailed items as follows:

Planning: Includes 4 items and assesses if the company has an initial
planning in the selection process. It establishes if it complies with
the percentage established in the legislation that includes the type

- of disability, the realization of the selection process and the induction of the PwD.
- Inclusion: Includes 4 items and reviews the social inclusion in the work activity, physical accessibility depending on the type of disability, as well as signaling and information and communication appropriate to the PwD.
- Equity: Includes 4 items and analyzes the equity of rights and benefits, awareness, job relocation and recognition of good job performance.
- Development: Includes 4 items and establishes training, evaluation, development and promotion as well as adaptation of the job.

Each item was valued through three criteria: i) best practice; (ii) good practice; iii) in process, each being understood as follows:

- Best Practice: It goes beyond compliance with the Organic Law of Disabilities, revised *ut supra*, that is to say that it not only complies with the law but also develops improvements in each process (excellence), and it is valued with a score of 10.
- Good Practice: Complies with established regulations and is valued with a score of 5
- In Process: It is planned to be done and it is rated with a score of 0

# 4. Analysis and results

The results have been identified after the surveys were applied. Percentages are determined and applying the arithmetic mean results are grouped by dimensions, as detailed in chart 3:

Chart 3. Application of each dimension in the Companies by activity Sector

Actividad Sectorial Empresarial	Planning	Inclusion	Equity	Development
Industrial sector	9,09%	11,08%	8,81%	6,96%
Commercial sector	9,38%	12,03%	10,78%	8,75%
Service sector	9,87%	10,08%	7,41%	6,79%

The commercial sector has percentages that stand out from the rest in terms of the inclusion, equity and development variables, while

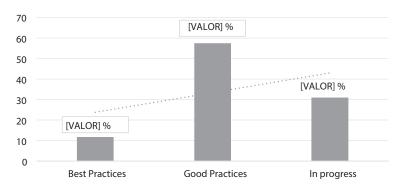
in the services sector it stands out in planning. Chart 4 shows the results on the best business practices by sector activity:

Sector Activity	Best Practice	Good Practice	In Process
Industrial sector	16,27%	51%	34,09%
Commercial sector	13,95%	56,85%	29,2%
Service sector	8,57%	60,89%	30,31%

**Table 4. Best Business Practices** 

The industrial sector is identified as the one with best business practices, with a result of 16.27%, followed by the commercial sector with 13.95% and the services sector with 8.57%. In this way, a consolidated chart (figure 1) is established with information on best business practices in the Inclusion of Persons with Disabilities.

Figure 1. Consolidated figure of interrelationship between best and good practices and companies «in process»



Of the 80 companies surveyed, 11.70% were those who performed the best business practices, 57.5% performed good business practices, while 30.9% were in the process.

### Discussion and conclusions

Of the four axes established for the identification of best practices, the «planning» is analyzed first, which shows a high percentage in the services sector with 9.87%, which motivates the companies to have an approach with organizations such as the National Disability Council

(CONADIS) and in turn with the Labor Integration Services (SILL), agencies that are in charge of providing business advice, as well as awareness talks on inclusion.

It is also analyzed that the selection and induction processes must be adapted to the PwD, considering that the company must build inclusive tools (communication techniques) that allow them to socialize the internal code of ethics, the administrative manual, the occupational safety and health or any other relevant information regarding timetables and salaries (Ministry of Labor Relations - Directorate of Attention to Priority Groups - Conadis, 2013).

The axis of «inclusion» analyzes the social and cultural activities carried out by the company and how is the participation of Persons with Disabilities (PwD). It also includes physical accessibility, signaling and communication in the commercial sector, appreciating a high value compared to other sectors with 12.03%. In this sense, it should be pointed out that people with disabilities should have the best treatment, which should be a priority and not different, characterized by respect (Ministry of Labor Relations - Directorate of Attention to Priority Groups - Conadis, 2013).

The axis of «equity» analyzes the benefits and rights that have the PwD and if the employees have been sensitized to the disability. Also if the company has processes of social-labor relocation and if the organization has policies of recognition for the good work performance. In this area, the commercial sector accounts for 10.78% of the industrial and services sectors.

Finally, the axis of «development», which is one of the axes that must be improved since it is the lowest with respect to the others, analyzes how the company includes the PwDs in training and training processes, as well as analyze if the system of evaluation is in accordance with the requirements of the PwD, since depending on the skills or abilities of people with disabilities, the instruments must be adapted or made adjustments accordingly (Ministry of Labor Relations - Directorate of Attention to Priority Groups - Conadis, 2013).

This also includes a review on promotions and development in the workplace. An important point to stress is the need to adapt the workplace if necessary, according to the type of disability that the employee has, as in the previous dimensions, the axes of «inclusion»

and «equity» in the commercial sector stand out 8.75% more than the other sectors.

Finally, of the 80 companies surveyed, 11.70% correspond to those that perform the best business practices; it means that there is a business group concerned with achieving the welfare and inclusion of its PwD. For their part, a group corresponding to 57.5% - that is, more than half of companies surveyed - obtain a positive evaluation of good business practices, while 30.9% are in the process of being applied.

With respect to the above objective, it can be pointed out that companies play an important role in the labor market, and as such it is evident that more than half of companies surveyed perform good business practices, establishing inclusion processes according to the requirements of the People with Disabilities (PwD). On the other hand, the possibility of future research is left open to analyze each of the established dimensions, as well as to investigate the needs of the business sectors in the appropriate location of Persons with Disabilities.

The limitations of the study were basically of time, because it has been determined as an initial diagnosis of how the business sector faces the inclusion of people with disabilities. In this sense it is important to establish that the behavior of the variables analyzed within a year should be studied to identify new results.

#### 5. References

- Asamblea Nacional República del Ecuador. (25 de septiembre de 2012). Registro Oficial. Ley Orgánica de Discapacidades. Quito, Pichincha, Ecuador: Tribunal Constitucional de la República del Ecuador.
- Banco Interamericano de Desarrollo. (Mayo de 2011). Responsabilidad de la empresa ante la sociedad - Antonio Vives. La Responsabilidad Social de la empresa en América Latina. New York, Estados Unidos: BID.
- Berenson, M. L., Levine, D. M., & Krehbiel, T. C. (2001). Estadística para administración. México: Pearson Educación.
- Bernal, C. A. (2010). Metodología de la Investigación. Bogotá: Pearson Educación.
- Blanco Prieto, A. (2015). Responsabilidad social empresarial e integración laboral de personas con discapacidad intelectual. Estudio de Caso. Revista Española de Discapacidad, 211-217.
- Consejo Nacional de Discapacidades CONADIS Instituto Ecuatoriano de Seguridad Social IESS. (1 de julio de 2016). *Estadísticas Conadis*. Available in Estadísticas Conadis: http://www.consejodiscapacidades.gob.ec/estadistica/index.html
- Consejo Nacional de la Igualdad de Discapacidades CONADIS. (2 de diciembre de 2013). Agenda Nacional para la Igualdad en Discapacidades 2013 2017.

- Cambiando Vidas. Quito, Pichincha, Ecuador: Equipo Técnico Consejo Nacional de Discapacidades. Available in http://www.planificacion.gob.ec/wp-content/uploads/downloads/2014/09/Agenda-Nacional-para-Discapacidades.pdf
- Consejo Nacional para la Igualdad de Discapacidades. (1 de julio de 2016). Consejo Nacional para la Igualdad de Discapacidades. Available in www.consejodiscapacidades.gob.ec/estadistica/index.html
- Fundación General Ecuatoriana. (2010). I Reconocimiento empresarial a las mejores prácticas en inclusión sociolaboral de personas con discapacidad. Quito: Fundación General Ecuatoriana.
- García Ruiz, A. S., & Fernández Moreno, A. (2005). La inclusión para las personas con discapacidad: entre la iguladad y la diferencia. *Revista Ciencias de la Salud*, 235-246. Available in http://www.redalyc.org/pdf/562/56230213.pdf
- Ministerio de Inclusión Económica y Social. (9 de enero de 2013). Ministerio de Inclusión Económica y Social. Available in http://www.inclusion.gob.ec/wp-content/uploads/downloads/2013/02/ESTATUTO-ORGA%CC%81NICO-POR-PROCESOS-MIES-al-09-enero-2013-5.pdf
- Ministerio de Relaciones Laborales CONADIS. (4 de Diciembre de 2013). Ministerio de Trabajo. Manual de buenas prácticas para la Inclusión laboral de personas con discapacidad. Quito, Pichincha, Ecuador. Available in Manual de Buenas Prácticas para la inclusión laboral de personas con discapacidad: http://www.trabajo.gob.ec/wp-content/uploads/2013/12/MANUALFIN.pdf
- Ministerio de Relaciones Laborales Dirección de Atención a Grupos Prioritarios Conadis. (2013). Consejo de Discapacidades. Available in Manual de Buenas prácticas para la Inclusión laboral de Personas con Discapacidad: http://www.consejodiscapacidades.gob.ec/wp-content/uploads/downloads/2014/06/manual buenas practicas inclusion laboral.pdf
- Reyes Giménez, A. (2015). Empleabilidad de personas con discapacidad desde el marco rector de SENADIS, Paraguay. Revista Internacional de Integración en Ciencias Sociales, 209-222. Available in http://revistacientifica.uaa.edu.py/index.php/riics/article/view/268
- Rodríguez, V., & Cueto, B. (2013). El trabajo de las personas con discapacidad ante la crisis. *Revista Internacional de Organizaciones*, 61-86. Available in https://dial-net.unirioja.es/servlet/articulo?codigo=4994810

# Basic writing rules

Universidad Politécnica Salesiana del Ecuador

#### 1. General information

"Retos" is a bilingual scientific publication by the Universidad Politécnica Salesiana de Ecuador, which has been edited on a bi-annual basis since January 2011. The journal focuses on Development and transdisciplinary issues including Public Administration, Social Economics, Marketing, Tourism, Entrepreneurship, Management, Administrative and Economic Science, etc.

It is an arbitrated Scientific Journal that uses an external evaluation system known as *peer-review*, employing *double-blind review*, in accordance with the American Psychological Association (APA) style rules. By using this system, the authors have access to an objective, impartial and transparent review process, which facilitates their publication being included in databases, repositories, and international indexed references.

"Retos" is indexed in the selective directory and catalog of the Online Regional Information System for Scientific Journals in Latin America, the Caribbean, Spain, and Portugal (Latindex), in the REDALYC Scientific Information System, the Directory of Open Access Journals in repositories, libraries, and specialized catalogs in Ibero-America.

The Journal is published with two different editions: printed (ISSN: 1390-62911) and electronic (e-ISSN: 1390-8618), in Spanish and English, and each article is identified with a DOI (Digital Object Identifier System).

# 2. Scope and policies

#### 2.1. Themes

Original contributions in Development issues, as well as related fields: Public Administration, Social Economics, Marketing, Tourism, Entrepreneurship, Management...and all other disciplines related to the central thematic issue.

#### 2.2. Contributions

"Retos" preferably publishes the results of empirical research about Development, written in Spanish and/or English, while reports, studies, and proposals are also accepted, as well as reviews of state-of-the-art literature.

All of the publications must be original, never have been published in any other journal, and not be undergoing any arbitration or publication processes. Contributions to the journal can include any of the following:

- **Research:** 5,000 to 6,500 words of text, including the title, abstracts, keywords, tables, and references.
- **Reports, Studies, and Proposals:** 5,000 to 6,500 words of text, including the title, abstracts, tables, and references.
- Reviews: 6,000 to 7,000 words of text, including tables and references. Justified, current, and selective references shall be evaluated, and should include around 70 publications.

"Retos" is published bi-annually (20 articles per year), in April and October, and each edition has two sections with five articles each, the first containing a **Monograph** theme edited by subject matter experts, and a second **Miscellaneous** section, made up of diverse contributions related to the publication's theme.

# 3. Presentation, structure, and submission of manuscripts

Papers are to be presented with Arial 10 typeface, single line spacing, all justified, without indentation or blank spaces between paragraphs. A space is only to be included between the major sections (title, authors, abstracts, keywords, credits, and epigraphs). All margins on each page must be 2 cm.

The papers are to be presented in Microsoft Word format (.doc or .docx), and the file is to be anonymous in the File Properties such that the author(s) is(are) not identified.

Manuscripts are to be submitted only through the OJS (Open Journal System), in which all authors must first register. Original papers sent via email or another interface are not accepted.

# 3.1. Manuscript Structure

For papers that are empirical research, the manuscripts are to follow IMRDC structure, while Notes and Contributions epigraphs are optional. Papers that constitute reports, studies, proposals, and reviews are afforded

greater flexibility in terms of epigraphs, especially in relation to Materials and Methods, Analysis and Results, and Discussion and Conclusions. All types of papers are required to include References.

- 1) Title (Spanish) / Title (English): Concise but informative, the first line in Spanish and the second, in English. Maximum 80 characters are accepted, including spaces. The Editorial Board is allowed to propose changes to the author's title.
- 2) First and last names: of each of the authors, organized in order of priority. Maximum three authors are accepted per original paper, although justified exceptions may be allowed, based on the theme, complexity, and length. The names are to be followed by the professional category, workplace, each author's email address and ORCID number. It is mandatory to include whether the author has a doctorate degree (Dr. before the name).
- 3) Abstract (Resumen, Spanish) / Abstract (English): This section can contain a maximum of 230 words, first in Spanish and then in English. The abstract shall concisely contain the following, and in this order: 1) Justification of the theme; 2) Objectives; 3) Methods and sample; 4) Main results; 5) Main conclusions. It should be written impersonally "This paper analyzes..." In the abstract, automatic translation is not accepted due to its poor quality.
- 4) Keywords (descriptores, Spanish) / Keywords (English): Six keywords are to be included for each language, and must be directly related to the paper's theme. This requirement shall be scored based on whether the keywords can be found in the UNE-SCO Thesaurus.
- 5) Introduction and State of the Question: The section proposes the question, the context of the issue surrounding it, justification, basis, and proposal for the study, using bibliographic references, including the most important up-to-date literature on the theme, both nationally and internationally.
- 6) Material and Methods: This is to be composed in such a way that the reader can easily understand how the research was performed. As appropriate, describe the method, sample, sampling, and refer to the type of statistical analysis used. If it is an original method, present the reasons for applying it, and describe any possible limitations.
- 7) Analysis and Results: This section should seek to highlight the most important observations, and without including any value

- judgments, describe the methods used. Throughout the text, essential tables and figures shall be included in a logical sequence, without repeating any data.
- 8) Discussion and Conclusions: This section summarizes the most important findings related to any observations from relevant studies, pointing out contributions and limitations, without repeating data from other sections. The discussion and conclusions paragraph is to include inferences and new lines of research for the future.
- 9) Contributions and acknowledgment (optional): The Science Editors Board recommends that the author(s) specify the financing source for their research. Priority shall be given to work endorsed by competitive national or international projects. Regardless, for the manuscript to be scientifically evaluated, it is to be anonymized with an XXXX only for the initial evaluation, in order to avoid identification of any of the authors or research teams, which are to be named in the Cover Letter and later, in the final manuscript.
- 10) Notes (optional) are included, only if necessary, at the end of the article (before the references). They are to be included manually, since the Word footnotes are not recognized by the layout systems. Note numbers are to be included using superscript, both in the text and in the final note. Notes including simple bibliographic references (without comments) are not allowed, since these are supposed to be included in the references.
- 11) **References:** Bibliographic references are to follow the text references. Under no circumstances should references be included that have not been cited in the text. There should be enough references in order to contextualize the theoretical framework, and be based on criteria of contemporary relevance and importance. They are presented alphabetically, according to the author's last name (if the last name has more than one word, based on the first word of the last name).

### 3.2. Rules for references

# Periodical publications

**Journal article (one author)** Valdés-Pérez, D. (2016). Incidencia de las técnicas de gestión en la mejora de decisiones administrativas [Impact

of Management Techniques on the Improvement of Administrative Decisions]. Retos, 12(6), 199-2013. https://doi.org/10.17163/ret.n12.2016.05

Journal article (up to six authors): Ospina, M.C., Alvarado, S.V., Fefferman, M., & Llanos, D. (2016). Introducción del dossier temático "Infancias y juventudes: violencias, conflictos, memorias y procesos de construcción de paz" [Introduction of the thematic dossier "Infancy and Youth: Violence, Conflicts, Memories and Peace Construction Processes"]. *Universitas*, 25(14), 91-95. https://doi.org/10.17163/uni.n25.%25x

Journal article (more than six authors): Smith, S.W., Smith, S.L. Pieper, K.M., Yoo, J.H., Ferrys, A.L., Downs, E.,... Bowden, B. (2006). Altruism on American Television: Examining the Amount of, and Context Surronding. Acts of Helping and Sharing. *Journal of Communication*, 56(4), 707-727. https://doi.org/10.1111/j.1460-2466.2006.00316.x

**Journal article (with no DOI).** Rodríguez, A. (2007). Desde la promoción de salud mental hacia la promoción de salud: La concepción de lo comunitario en la implementación de proyectos sociales. *Alteridad*, 2(1), 28-40. (https://goo.gl/zDb3Me) (2017-01-29).

### Books and chapters of books

**Complete books:** Cuéllar, J.C., & Moncada-Paredes, M.C. (2014). *El peso de la deuda externa ecuatoriana*. Quito: Abya-Yala.

**Chapters of a book:** Zambrano-Quiñones, D. (2015). *El ecoturismo comunitario en Manglaralto y Colonche*. En V.H. Torres (Ed.), Alternativas de Vida: Trece experiencias de desarrollo endógeno en Ecuador (pp. 175-198). Quito: Abya-Yala.

#### Electronic media

Pérez-Rodríguez, M.A., Ramírez, A., & García-Ruíz, R. (2015). La competencia mediática en educación infantil. Análisis del nivel de desarrollo en España. Universitas Psychologica, 14(2), 619-630. https://doi.org.10.11144/Javeriana.upsy14-2.cmei

All reference that have a DOI (Digital Object Identifier System) must be included in the References (which can be obtained at http://goo.gl/gfruh1). All of the journals and books that do not have a DOI are to appear with a link (to the online version, if available, shortened using Google Shortener: http://goo.gl) and the date of query in said format.

Journal articles are to be listed in English, except for those that are available in Spanish and English, in which case, both languages are to be included in brackets. All internet addresses presented are to be shortened in the manuscript, except for the DOI, which are to be included in the established format (https://doi.org/XXX).

### 3.3. Epigraphs, Tables, and Graphs

The epigraphs in the article's body are in Arabic numbers. These are to avoid all capital letters, underlining, or bold text. Numbering should use maximum three levels: 1. / 1.1. / 1.1.1. A carriage return is to be used at the end of each epigraph.

Tables are to be included in the text in Word format, according to their order of appearance, with Arabic numbering and captioned with a description of their content.

Graphics or figures should be kept to a minimum and incorporated into the text, in accordance with their order of appearance, with Arabic numbers and captions with a short description. Quality should be no less than 300 ppp, if necessary, using TIFF, PNG, or JPEG formats.

### 4. Submission process

The papers are to be submitted in two files through the journal's OJS system:

- 1) Cover letter and title page, which includes the title in Spanish and English, first and last names of the authors (standardized format) with ORCID number, abstract in Spanish and English, keywords in Spanish and English, and a declaration that the manuscript constitutes an original contribution that has not been sent for evaluation in another journal, confirmation of the authorship, acceptance (as the case may be) of formal changes to the manuscript according to the rules, and partial transfer of copyright to the publishing house (use the official format).
- 2) Completely anonymized manuscript in accordance with the preceding rules.

All authors are to register on the OJS platform, even if only one of them will be in charge of correspondence. No author can submit two manuscripts simultaneously, with a penalty of not being able to participate in four consecutive editions (2 years).

# Normas editoriales básicas

Universidad Politécnica Salesiana del Ecuador

### 1. Información general

«Retos» es una publicación científica bilingüe de la Universidad Politécnica Salesiana de Ecuador, editada desde enero de 2011 de forma ininterrumpida, con periodicidad fija semestral, especializada en Desarrollo y sus líneas transdisciplinares como Administración Pública, Economía Social, Marketing, Turismo, Emprendimiento, Gerencia, Ciencias Administrativas y Económicas, entre otras.

Es una Revista Científica arbitrada, que utiliza el sistema de evaluación externa por expertos (peer-review), bajo metodología de pares ciegos (doble-blind review), conforme a las normas de publicación de la American Psychological Association (APA). El cumplimiento de este sistema permite garantizar a los autores un proceso de revisión objetivo, imparcial y transparente, lo que facilita a la publicación su inclusión en bases de datos, repositorios e indexaciones internacionales de referencia.

«Retos» se encuentra indexada en el directorio y catálogo selectivo del Sistema Regional de Información en Línea para Revistas Científicas de América Latina, el Caribe, España y Portugal (Latindex), en el Sistema de Información Científica REDALYC, en el Directorio de Revistas de Acceso Abierto DOAJ y en repositorios, bibliotecas y catálogos especializados de Iberoamérica.

La Revista se edita en doble versión: impresa (ISSN: 1390-62911) y electrónica (e-ISSN: 1390-8618), en español e inglés, siendo identificado además cada trabajo con un DOI (Digital Object Identifier System).

# 2. Alcance y política

#### 2.1. Temática

Contribuciones originales en materia de Desarrollo, así como áreas afines: Administración Pública, Economía Social, Marketing, Turismo, Emprendimiento, Gerencia... y todas aquellas disciplinas conexas interdisciplinarmente con la línea temática central.

### 2.2. Aportaciones

«Retos» edita preferentemente resultados de investigación empírica sobre Desarrollo, redactados en español y/o inglés, siendo también admisibles informes, estudios y propuestas, así como selectas revisiones de la literatura (state-of-the-art).

Todos los trabajos deben ser originales, no haber sido publicados en ningún medio ni estar en proceso de arbitraje o publicación. De esta manera, las aportaciones en la revista pueden ser:

- **Investigaciones:** 5.000 a 6.500 palabras de texto, incluyendo título, resúmenes, descriptores, tablas y referencias.
- **Informes, estudios y propuestas:** 5.000 a 6.500 palabras de texto, incluyendo título, resúmenes, tablas y referencias.
- Revisiones: 6.000 a 7.000 palabras de texto, incluidas tablas y referencias. Se valorará especialmente las referencias justificadas, actuales y selectivas de alrededor de unas 70 obras.

«Retos» tiene periodicidad semestral (20 artículos por año), publicada en los meses de abril y octubre y cuenta por número con dos secciones de cinco artículos cada una, la primera referida a un tema **Monográfico** preparado con antelación y con editores temáticos y la segunda, una sección de **Misceláneas**, compuesta por aportaciones variadas dentro de la temática de la publicación.

# 3. Presentación, estructura y envío de los manuscritos

Los trabajos se presentarán en tipo de letra Arial 10, interlineado simple, justificado completo y sin tabuladores ni espacios en blanco entre párrafos. Solo se separarán con un espacio en blanco los grandes bloques (título, autores, resúmenes, descriptores, créditos y epígrafes). La página debe tener 2 centímetros en todos sus márgenes.

Los trabajos deben presentarse en documento de Microsoft Word (.doc o .docx), siendo necesario que el archivo esté anonimizado en Propiedades de Archivo, de forma que no aparezca la identificación de autor/es.

Los manuscritos deben ser enviados única y exclusivamente a través del OJS (Open Journal System), en el cual todos los autores deben darse de alta previamente. No se aceptan originales enviados a través de correo electrónico u otra interfaz.

#### 3.1. Estructura del manuscrito

Para aquellos trabajos que se traten de investigaciones de carácter empírico, los manuscritos seguirán la estructura IMRDC, siendo opcionales los epígrafes de Notas y Apoyos. Aquellos trabajos que por el contrario

se traten de informes, estudios, propuestas y revisiones podrán ser más flexibles en sus epígrafes, especialmente en Material y métodos, Análisis y resultados y Discusión y conclusiones. En todas las tipologías de trabajos son obligatorias las Referencias.

- 1) Título (español) / Title (inglés): Conciso pero informativo, en castellano en primera línea y en inglés en segunda. Se aceptan como máximo 80 caracteres con espacio. El título no solo es responsabilidad de los autores, pudiéndose proponer cambios por parte del Consejo Editorial.
- 2) Nombre y apellidos completos: De cada uno de los autores, organizados por orden de prelación. Se aceptarán como máximo 3 autores por original, aunque pudieren existir excepciones justificadas por el tema, su complejidad y extensión. Junto a los nombres ha de seguir la categoría profesional, centro de trabajo, correo electrónico de cada autor y número de ORCID. Es obligatorio indicar si se posee el grado académico de doctor (incluir Dr./Dra. antes del nombre).
- 3) Resumen (español) / Abstract (inglés): Tendrá como extensión máxima 230 palabras, primero en español y después en inglés. En el resumen se describirá de forma concisa y en este orden: 1) Justificación del tema; 2) Objetivos; 3) Metodología y muestra; 4) Principales resultados; 5) Principales conclusiones. Ha de estar escrito de manera impersonal "El presente trabajo analiza...". En el caso del abstract no se admitirá el empleo de traductores automáticos por su pésima calidad.
- 4) Descriptores (español) / Keywords (inglés): Se deben exponer 6 descriptores por cada versión idiomática relacionados directamente con el tema del trabajo. Será valorado positivamente el uso de las palabras claves expuestas en el Thesaurus de la UNESCO.
- 5) Introducción y estado de la cuestión: Debe incluir el planteamiento del problema, el contexto de la problemática, la justificación, fundamentos y propósito del estudio, utilizando citas bibliográficas, así como la literatura más significativa y actual del tema a escala nacional e internacional.
- 6) Material y métodos: Debe ser redactado de forma que el lector pueda comprender con facilidad el desarrollo de la investigación. En su caso, describirá la metodología, la muestra y la forma de muestreo, así como se hará referencia al tipo de análisis estadístico empleado. Si se trata de una metodología original, es necesario exponer las razones que han conducido a su empleo y describir sus posibles limitaciones.
- 7) Análisis y resultados: Se procurará resaltar las observaciones más importantes, describiéndose, sin hacer juicios de valor, el material y métodos empleados. Aparecerán en una secuencia lógica en el texto y las tablas y figuras imprescindibles evitando la duplicidad de datos.

- 8) Discusión y conclusiones: Resumirá los hallazgos más importantes, relacionando las propias observaciones con estudios de interés, señalando aportaciones y limitaciones, sin redundar datos ya comentados en otros apartados. Asimismo, el apartado de discusión y conclusiones debe incluir las deducciones y líneas para futuras investigaciones.
- 9) Apoyos y agradecimientos (opcionales): El Council Science Editors recomienda a los autor/es especificar la fuente de financiación de la investigación. Se considerarán prioritarios los trabajos con aval de proyectos competitivos nacionales e internacionales. En todo caso, para la valoración científica del manuscrito, este debe ir anonimizado con XXXX solo para su evaluación inicial, a fin de no identificar autores y equipos de investigación, que deben ser explicitados en la Carta de Presentación y posteriormente en el manuscrito final.
- 10) Las notas (opcionales) irán, solo en caso necesario, al final del artículo (antes de las referencias). Deben anotarse manualmente, ya que el sistema de notas al pie o al final de Word no es reconocido por los sistemas de maquetación. Los números de notas se colocan en superíndice, tanto en el texto como en la nota final. No se permiten notas que recojan citas bibliográficas simples (sin comentarios), pues éstas deben ir en las referencias.
- 11) Referencias: Las citas bibliográficas deben reseñarse en forma de referencias al texto. Bajo ningún caso deben incluirse referencias no citadas en el texto. Su número debe ser suficiente para contextualizar el marco teórico con criterios de actualidad e importancia. Se presentarán alfabéticamente por el primer apellido del autor.

# 3.2. Normas para las referencias

Publicaciones periódicas

Artículo de revista (un autor): Valdés-Pérez, D. (2016). Incidencia de las técnicas de gestión en la mejora de decisiones administrativas [Impact of Management Techniques on the Improvement of Administrative Decisions]. Retos, 12(6), 199-2013. https://doi.org/10.17163/ret.n12.2016.05

Artículo de revista (hasta seis autores): Ospina, M.C., Alvarado, S.V., Fefferman, M., & Llanos, D. (2016). Introducción del dossier temático "Infancias y juventudes: violencias, conflictos, memorias y procesos de construcción de paz" [Introduction of the thematic dossier "Infancy and Youth: Violence, Conflicts, Memories and Peace Construction Processes"]. Universitas, 25(14), 91-95. https://doi.org/10.17163/uni.n25.%25x

Artículo de revista (más de seis autores): Smith, S.W., Smith, S.L. Pieper, K.M., Yoo, J.H., Ferrys, A.L., Downs, E.,... Bowden, B. (2006).

Altruism on American Television: Examining the Amount of, and Context Surronding. Acts of Helping and Sharing. *Journal of Communication*, 56(4), 707-727. https://doi.org/10.1111/j.1460-2466.2006.00316.x

Artículo de revista (sin DOI): Rodríguez, A. (2007). Desde la promoción de salud mental hacia la promoción de salud: La concepción de lo comunitario en la implementación de proyectos sociales. *Alteridad*, 2(1), 28-40. (https://goo.gl/zDb3Me) (2017-01-29).

### Libros y capítulos de libro

**Libros completos:** Cuéllar, J.C., & Moncada-Paredes, M.C. (2014). El peso de la deuda externa ecuatoriana. Quito: Abya-Yala.

Capítulos de libro: Zambrano-Quiñones, D. (2015). El ecoturismo comunitario en Manglaralto y Colonche. En V.H. Torres (Ed.), Alternativas de Vida: Trece experiencias de desarrollo endógeno en Ecuador (pp. 175-198). Quito: Abya-Yala.

#### Medios electrónicos

Pérez-Rodríguez, M.A., Ramírez, A., & García-Ruíz, R. (2015). La competencia mediática en educación infantil. Análisis del nivel de desarrollo en España. Universitas Psychologica, 14(2), 619-630. https://doi.org.10.11144/Javeriana.upsy14-2.cmei

Es prescriptivo que todas las citas que cuenten con DOI (Digital Object Identifier System) estén reflejadas en las Referencias (pueden obtenerse en http://goo.gl/gfruh1). Todas las revistas y libros que no tengan DOI deben aparecer con su link (en su versión on-line, en caso de que la tengan, acortada, mediante Google Shortener: http://goo.gl) y fecha de consulta en el formato indicado.

Los artículos de revistas deben ser expuestos en idioma inglés, a excepción de aquellos que se encuentren en español e inglés, caso en el que se expondrá en ambos idiomas utilizando corchetes. Todas las direcciones web que se presenten tienen que ser acortadas en el manuscrito, a excepción de los DOI que deben ir en el formato indicado (https://doi.org/XXX).

### 3.3. Epígrafes, tablas y gráficos

Los epígrafes del cuerpo del artículo se numerarán en arábigo. Irán sin caja completa de mayús-culas, ni subrayados, ni negritas. La numeración ha de ser como máximo de tres niveles: 1. / 1.1. / 1.1.1. Al final de cada epígrafe numerado se establecerá un retorno de carro.

Las tablas deben presentarse incluidas en el texto en formato Word según orden de aparición, numeradas en arábigo y subtituladas con la descripción del contenido.

Los gráficos o figuras se ajustarán al número mínimo necesario y se presentarán incorporadas al texto, según su orden de aparición, numeradas en arábigo y subtituladas con la descripción abreviada. Su calidad no debe ser inferior a 300 ppp, pudiendo ser necesario contar con el gráfico en formato TIFF, PNG o JPEG.

#### 4. Proceso de envío

Deben remitirse a través del sistema OJS de la revista dos archivos:

- 1) Presentación y portada, en la que aparecerá el título en español e inglés, nombres y apellidos de los autores de forma estandarizada con número de ORCID, resumen, abstract, descriptores y keywords y una declaración de que el manuscrito se trata de una aportación original, no enviada ni en proceso de evaluación en otra revista, confirmación de las autorías firmantes, aceptación (si procede) de cambios formales en el manuscrito conforme a las normas y cesión parcial de derechos a la editorial (usar modelo oficial de portada).
- 2) Manuscrito totalmente anonimizado, conforme a las normas referidas en precedencia.

Todos los autores han de darse de alta, con sus créditos, en la plataforma OJS, si bien uno solo de ellos será el responsable de correspondencia. Ningún autor podrá enviar o tener en revisión dos manuscritos de forma simultánea, estimándose una carencia de cuatro números consecutivos (2 años).