



Sustainable management model to strengthen competitiveness in “Supermarket” retail companies in the region of Coquimbo, Chile

Modelo de gerencia sustentable para fortalecer la competitividad en las empresas del retail “supermercados” de la región de Coquimbo, Chile

Ricardo Cabana Villca, Cristhian Javier Pino Castillo *

Universidad de La Serena, Chile

Received April 13, 2018; accepted May 9, 2019

Available online March 3, 2020

Abstract

In 2014, retail companies in Chile had sales equivalent to US \$ 76 000 millions, however, supermarkets only contribute about 20% of the total of these sales. In addition, in the Coquimbo Region, the supermarket sales index is one of the lowest 4 in the country. That is why the sustainable management model is developed, since in such changing contexts increasing competitiveness is urgent and strategic. This research aims to perform an analysis of the factors that affect sustainable management, these are: organizational factors, environmental factors, organizational commitment to sustainability, transactional leadership and transformational leadership. In turn, sustainable management will influence competitiveness, proposing a model with 8 hypotheses. A labor force represented by a sample of 361 workers is taken as the target population. For the contrast of the proposed model, the method of structural equations

*Corresponding author.

E-mail address: cristhianjpc@gmail.com (C. J. Pino Castillo).

Peer Review under the responsibility of Universidad Nacional Autónoma de México.

<http://dx.doi.org/10.22201/fca.24488410e.2020.2007>

0186- 1042/©2019 Universidad Nacional Autónoma de México, Facultad de Contaduría y Administración. This is an open access article under the CC BY-NC-SA (<https://creativecommons.org/licenses/by-nc-sa/4.0/>)

is used, through those of Partial Least Squares (PLS). It was determined that the previously mentioned constructs explain in 81.6% the variance of sustainable management, and this, in turn, explains in 68.4% the variance of competitiveness, accepting the total of the hypotheses made.

JEL code: M14, M14, O15, Q50, O40

Keywords: Sustainable management; Organizational factors; Leadership; Environment factors; Competitiveness

Resumen

En 2014 las empresas del retail en Chile tuvieron ventas equivalentes a US\$ 76 000 millones, no obstante, los supermercados solo aportan cerca de un 20% del total de estas ventas. Además, en la región de Coquimbo el índice de ventas de supermercados es uno de los 4 más bajos a nivel país, es por ello, que se desarrolla el modelo de gerencia sustentable, ya que en contextos tan cambiantes aumentar la competitividad es urgente y estratégico. Esta investigación tiene como objetivo realizar un análisis de los factores que afectan la gerencia sustentable, estos son: factores organizacionales, factores del entorno, compromiso organizacional con la sustentabilidad, liderazgo transaccional y liderazgo transformacional. A su vez, la gerencia sustentable influirá sobre la competitividad, proponiendo de esta forma un modelo con 8 hipótesis. Se toma como población objetivo una fuerza laboral representada por una muestra de 361 trabajadores. Para el contraste del modelo propuesto se emplea el método de ecuaciones estructurales, a través de los Mínimos Cuadrados Parciales (PLS). Se determinó que los constructos anteriormente señalados explican en un 81.6% la varianza de la gerencia sustentable, y ésta, a su vez, explica en un 68.4% la varianza de la competitividad, aceptando el total de las hipótesis realizadas.

Código JEL: M14, M14, O15, Q50, O40

Palabras clave: Gerencia sustentable; Factores organizacionales; Liderazgo; Factores del entorno; Competitividad

Introduction

In a globalized world where customers and the environmental factor are growing in importance, companies have had to broaden their vision to include sustainability within their business models. Continuous changes in the industry environment are giving more power to customers in a more interconnected world, with companies based on creating value and shared value, generating the challenge to strengthen capabilities to seize opportunities from chaos and threats. Therefore, globalization influences how people live, how they relate to each other, and how they do business (Cabana, Cortéz, Vega, & Cornejo, 2016).

This scenario promotes, in addition to profitability, concern for an environmental focus. In other words, the transformation of this traditional model into a more environmental model

by developing environmental technologies that help increase productivity by making it cleaner, generating green campaigns, which then leads managers to outline new organizational objectives that allow for greater production with a lower consumption of resources and a consequent reduction in pollution (Velásquez, 2017).

The planet faces a constant economic crisis, where caring for natural resources and raw materials is imperative for all companies as these are growing scarce and, consequently, expensive. On the other hand, society is becoming increasingly demanding, asking for goods and services that come from reliable sources that do not harm the environment. Therefore, the role of the leader focused on sustainable management is of great importance, since this achieves results that can have economic, environmental, and social implications (de Mello, 2015).

The leaders of retail companies in Chile must develop strategies that incentivize their workers to increase productivity using fewer energy resources, reducing pollutants, and contributing to developing their communities. They thus achieve not only economic value, but also a value that is distributed equitably to all its stakeholders, that is, they must be constant generators of shared value.

Most interest groups, such as customers, investors, communities, and workers, among others, are aware of the importance of sustainable elements in their management, and that they are evaluated when dealing with these organizations. For this reason, and under the concept of sustainable management, companies seek to satisfy the needs of current consumers without compromising the wellbeing of future generations, in other words, doing business without neglecting economic, social, and environmental impacts. The current trend is for companies to identify as sustainable since this directly affects the corporate reputation of companies in the community (Sánchez, 2011).

In 2014, Chile exported USD 75.675 billion, practically equivalent to the total retail sales in the same period, which were USD 76 billion. These sales are equivalent to 29% of the GDP of Chile in 2014, and supermarkets contributed 20% of them (*Economía y Negocios*, 2015). During 2016, supermarket retail companies created approximately 190,000 jobs in the country (INE, 2016), data that reflect the importance of these companies becoming more sustainable, thus increasing their competitiveness, achieving greater job creation, and better results that are favorable to the country.

There are currently 56 supermarkets in the region of Coquimbo, of which more than 90% belong to the four main retailers in the country (Walmart, Cencosud, SMU, & Falabella retail). These retailers use a sales area of 126,222 m² and obtain revenues equivalent to USD 6.795 billion at the country level (Table 1). Nevertheless, in 2016, the region presented an average

supermarket sales index (ISUP) of 113.93, which is one of the four lowest in the country, with a variation of 7.7% in 12 months. Of note is that the average ISUP at the country level, in 2016, was 120.22, illustrating that the region is below the standards desired at the national level (INE, 2016).

Table 1

Supermarket datasheet at the country and regional levels

Holding	Net income Million (USD)	Market participation in the country	No. of stores in the country	Workforce in the country	No. of stores in the region	Workforce in the region
Walmart	2,791	41%	363	43,202	13	1,740
Cencosud	1,911	28%	245	56,432	12	1,086
SMU	1,581	23.3%	510	32,909	24	2,747
Falabella	512	7.5%	61	51,201	2	290
Total	6,795	99.8%	1,179	183,744	51	5,863

Source: own elaboration based on annual reports¹

Based on the above, retail companies in Chile, and particularly the region of Coquimbo, must take on the challenge of increasing the value of marketed products and services. Sustainable management will influence the increase in the added value of their goods and services, all the while gradually capturing and building customer loyalty in a market where the segment with pro-environmental preferences is growing steadily in Chile and the world. Studies in Chile on business sustainability, directed at workers and customers, revealed that 91% of the sample recognized that the existence of sustainability policies in their company improved their work performance. Additionally, another 85% recognized that their loyalty to a company increases when it declares itself in favor of sustainability, and 93% expressed interest in participating in initiatives of the companies where they work, aimed at solving social problems of the community (PROhuman Foundation & PNUD Chile, 2002).

This study aims to identify and analyze the main variables that influence sustainable management and the results it produces in retail companies in the Coquimbo region. This will contribute to the implantation of sustainable business practices that enable Chilean and

¹Annual reports: Walmart data (Walmart annual report, 2016), Cencosud data (Cencosud annual report, 2016), SMU data (SMU annual report, 2016), Tottus data (Falabella annual report, 2016), Number of stores (INE, 2016).

global companies to increase their competitiveness, generating greater brand value, sustainable differentiation, and a competitive profit margin that will benefit all stakeholders.

Theoretical framework

Sustainable management

The role of the leader has evolved in organizations, with new styles being adopted, among them that of sustainability, in order to make the organization more efficient and competitive. Sustainable management is the business initiative that entails adopting decisions and practices concerning environmental care, and the wellbeing of employees and their families, all the while having a positive impact on the financial performance of an organization (Contreras & Rozo, 2015). Other authors indicate that sustainable management is the incentive for organizations to work with corporate social responsibility (CSR) and shared value, and that seeks to establish objectives compatible with social development, by preserving environmental and cultural resources for future generations, respecting diversity, and promoting the reduction of social inequalities (Sarmiento, 2010).

Sustainable management is capable of achieving results that provide competitiveness to the organization, seeking economic sustainability in these results—understood as the capability to grow and profitably develop an economic activity in the long term. Environmental sustainability refers to the effective protection of the physical environment, from which resources are generated that enable a company to be economically sustainable and create raw materials to produce its goods or services. Social sustainability aims to give back to society everything that has allowed it to achieve its growth (Díaz, 2013). Organizations and governments must recognize that there is a need to establish processes and strategies that allow for a balanced use of the available natural resources to ensure current and future development. Therefore, it is urgent to make strategic management a daily work practice, understanding it as the process that makes it possible to base and stimulate decisions to successfully develop and implement strategies that will provide a company with sustainable economic added value, focused on a constantly innovating value proposal and an economic value distributed equitably to each of its stakeholders (Cabana, Cortéz, Vega, & Cortés, 2016).

Components of sustainable management

Ferdig creates a relational model with eight principles on which leadership for sustainable management is based. These principles indicate that organizations must consider sustainability within their organizational factors; that is, sustainability must be immersed in the strategic framework, values, and policies of the company. Additionally, organizations must understand the dynamics of social change, learn, adjust, and expand awareness considering environmental factors that affect company sustainability, thus achieving an organizational commitment to sustainability (Ferdig, 2009).

The following are the main economic benefits that establishing sustainable management causes in any company: increased income, reduced expenditure on inputs, reduced strategic and operational risks, significant decrease in the percentage of fixed costs of the company, better income from products and services sold, improved work environment, and increased productivity (Ibarra, Soto, & Delgado, 2015). These benefits are key aspects of transactional leadership with a philosophy of sustainability.

In order to make an organization sustainable, a leader must have systemic interdisciplinary knowledge; emotional intelligence and a caring attitude; a value orientation that shapes the organizational culture; a strong vision to make a difference; an inclusive style that generates trust; and willingness to innovate and be radical (Nelson, 2011). In other words, they must have the characteristics of transformational leadership.

For a company, being sustainable means increasing its competitiveness, which is achieved through the sustainable management of its operations and relationships. Otherwise, it runs increasingly tangible risks of reducing or losing positions in some markets and being excluded from others (Sánchez, 2011).

Organizational factors

Organizational factors enhance and transform sustainable management from a strategic obligation to a conviction and a commitment of the organization to sustainability, these factors being the mission, vision, values, and business policies.

The mission of an organization is the statement of its purpose as a system of human activity, defining the current scope of the business and the expected changes in the future; it functions as a compass that guides the organization (Hernández, Ortega, & Garzón, 2011).

The strategic vision defines the aspirations of the managers for the company through an

overview of “where we are going” and compelling reasons why it makes good business sense (Thompson, Peteraf, & Strickland, 2012).

The values establish the ethical-social framework within which the company carries out its actions, forming part of the organizational culture, and establishing the limits within which the behavior of the individuals who belong to it must be framed, both organizationally and personally (Vidal & Sánchez, 2016).

The policies are the philosophy of the management and strategic thinking, which reflect the impact of the organization on society; additionally, these policies must articulate the strategy to follow (Fred, 2017).

The factors of organizational culture, such as mission, vision, values, and policies, have a significant impact on the organizational commitment to sustainability (Carro, Sarmiento, & Rosano, 2017).

Hypothesis 1: Organizational factors directly and positively impact on the organizational commitment to sustainability.

Environmental factors

There are three important environmental factors to consider in any organization when generating an organizational commitment to sustainability.

Community empowerment involves an intentional and continuous process through which individuals, organizations, and communities without equitable sharing of valued resources gain greater access and control over those resources (Ramos & Maya, 2014).

Government and public policies, on the other hand, are intentionally coherent decisions and actions adopted by the state to address a politically defined problem as a collective within a specific institutional framework. This set of decisions and actions gives rise to formal acts, with a variable degree of compulsion, aimed at modifying the behavior of social groups that, it is presumed, originate the collective problem to be solved (Castelao, 2016).

At the same time, globalization trends refer to the inclination of the market to generate new production processes, and sales methods, among others, given technological advances. The main influence for these advances is excessive population growth and environmental deterioration, as well as the need for organizations to generate competitive advantages that meet the needs of increasingly demanding customers (Soto & Matus, 2013).

From the external point of view, organizations are open systems that cannot escape the turbulence of the environment and must respond adequately to pressures since most of the

forces generating change come from the external environment. In this sense, the culture of organizational commitment to sustainability tends to be increasingly generated as a result of environmental trends (Febles & Oreja, 2008). For organizations, it is necessary to study their environmental factors since it allows them to prepare and have a strategy to fight the changes in the industry. In this way, it is possible to generate greater commitment, so as to obtain the established objectives, to respond to the challenges of the environment (Ávila, 2017).

Organizations committed to sustainability concern themselves with considering and managing environmental factors because estimating future scenarios can help organizational learning in strategic planning. In this scenario, the commitment to sustainability is prioritized, an achievement aligned with the strategy, knowledge of the external environment, and the speed of change, thus leading to the making of decisions with lower risk (Corrêa, 2011).

Hypothesis 2: Environmental factors directly and positively impact on organizational commitment to sustainability.

Organizational commitment to sustainability

This is the voluntary commitment of companies to the development of society and the preservation of the environment, from their social composition, and responsible behavior towards the people and social groups with whom they interact (Gallardo, 2006).

Organizational commitment is an attitude that expresses a psychological union between the individual and their organization. In other words, it is the degree of involvement with and loyalty of the workers to their company, demonstrated through the identification of employees with the sustainable objectives and environmental values of the organization, their contribution to the fulfillment of its goals and objectives, and their desire to be part of it (Aranque, Estepa, & Uribe, 2017). Commitment is the human, technical, and emotional ability of individuals and groups to interact and influence through values, in order to achieve goals and obtain sustainable results that benefit and safeguard present and future generations. Commitment to sustainability goes beyond temporary achievements, such as obtaining good scores to create lasting and significant educational improvements. It instead transforms the organization, giving it a real commitment to the aspects concerning sustainability (Hargreaves & Fink, 2007).

Currently, there is not only greater awareness in society but also a set of national and international standards whose mandatory or voluntary commitment brings obvious advantages and benefits for all. For this reason, companies select management that seeks to commit to sustainability in order to obtain these benefits (Matteo, 2014).

There is a relationship between business sustainability and organizational commitment, and it is important to reinforce the idea that sustainability practices in organizations respond to the operational context of the company, and to the particular case of reinforcing organizational commitment (Pelález, Solarte, & Rodríguez, 2014).

Additionally, it is important to note that there is a relationship between commitment to the organization and transactional leadership, thus achieving the fulfillment of goals and objectives more efficiently (Mendoza, García, & Xochitototl, 2014; Chen, Lee, & Lee, 2015).

Complementarily, transformational leadership directly relates to organizational commitment, since transformational leaders communicate a clear vision, inspire organizational commitment with that vision, and achieve trust and motivation (Hermosilla, Amutio, de la Costa, & Páez, 2016).

Hypothesis 3: Organizational commitment to sustainability directly and positively influences transactional leadership.

Hypothesis 4: Organizational commitment to sustainability directly and positively influences transformational leadership.

Hypothesis 5: Organizational commitment to sustainability directly and positively influences sustainable management.

Transactional leadership

Transactional leadership consists of the exchange of relationships between the leader and the followers, based on a series of transactions that have a connotation of cost reduction and risk-increase of benefit for the organization and its collaborators. According to Bass and Avolio, transactional leaders approach their followers to negotiate what is expected of them and what they will receive in return (Silva, Olsen, Pezzi, & Sanjurjo, 2016).

This style of leadership is based on the definition of the role of the subordinate and the positive or negative consequences of fulfilling or not the objectives and goals. It fits rigidly into the organizational goals and ensures that the workgroups under its responsibility concern themselves with carrying out the relevant actions to achieve said goals (Varela, 2012).

Transactional leadership relates to management since it brings employee satisfaction by obtaining a benefit for the fulfillment of its objectives. Transactional leadership can be a competitive advantage for organizations, so a manager needs to understand how some factors in the organizational environment can have an impact on employee satisfaction. On that basis, a manager will be able to take actions to modify employee behavior, improve the quality and

productivity of the work, encourage interpersonal relationships, and achieve job satisfaction, which results in organizational efficiency (Mendoza, García, & Xochitototl, 2014).

Hypothesis 6: Transactional leadership directly and positively influences sustainable management.

Transformational leadership

Transformational leadership is a social process established between the leaders and their followers. Transformational leaders are characterized by being charismatic and oriented toward getting to know each member of their team to provide them with challenges and opportunities for growth (Duran & Castañeda, 2015). They aim to strengthen the desire of their followers to succeed and improve, increasing their confidence and self-improvement, committing the workers to achieve the objectives through the values that govern the organization, promoting the wellbeing of the group and the development of the different organizations. The aim is to achieve both personal and institutional objectives through idealized influence (Silva, Olsen, Pezzi, & Sanjurjo, 2016). Additionally, transformational leaders encourage their collaborators to do their corresponding work, although not simply for a reward at the end of the road, or a salary at the end of the month, but rather focusing on having employees making the mission, vision, and organizational goals their own, generating a strategic alignment between the individual and organizational needs. In this sense, the desire to accomplish personal achievements such as growth, development, and happiness can be achieved through tasks developed within the organization and can contribute on two fronts at once (Varela, 2012).

The actions that characterize the transformational leadership style promote a more sustainable management style for organizations (Duran & Castañeda, 2015). In the phase of creating knowledge through transformational style leadership, it significantly and positively influences the generation of new ideas and their socialization, to deliver greater sustainability to the organization (Delgado, Pedraja, & Rodríguez, 2010).

Hypothesis 7: Transformational leadership directly and positively influences sustainable management.

Competitiveness

Competitiveness is the set of three large categories related to economic, human, and physical aspects in the micro, meso, and macro-environment that determine the level of productivity

sustained at the level of geographic regions (García, Lara, & de la Parra, 2017).

Adding sustainability to organizations generates greater brand value, among other benefits for the company, directly impacting organizational competitiveness with factors such as generating greater customer loyalty by increasing the value offer; making the company less vulnerable to the commercial actions of competitors and market crises; reducing the elasticity of demand in the face of price increases as a result of the higher price that a consumer is willing to pay for a brand that offers greater value; helping generate trust and support from distribution channels since they are stimulated by working with higher value brands; and improving the communication of the company with the community (Vera, 2008). It also creates greater differentiation. The differentiation strategy assumes an orientation toward sustainability, through which it aims to increase the competitiveness of the organization since the company seeks to obtain high levels of results by creating products perceived to be “unique” and “different” by competitors. Product or process innovation can also differentiate a company from its competitors, generating greater competitiveness by obtaining green seals for cleaner production processes (Ortega, Villaverde, Moreno, & Raquena, 2008).

By improving the brand value and the differentiation of goods and services, sustainable management helps manage the profit margin, becoming a key aspect that makes it possible to define the criteria to increase productivity, efficacy, and efficiency, which are essential for organizational competitiveness. Likewise, the dynamics of the financial subsystem affect the competitive reality of the organization (Botero, Acevedo, & Gómez, 2013).

Incorporating sustainability into organizations confers companies with characteristics that promote transparency and accountability with their stakeholders, compliance with established agreements, and conflict resolution, attributes that make the organization more competitive (Arredondo, de la Garza, & Parra, 2014). Sustainable management, more than a simple concept, is a generator of change that represents the proactivity, dynamism, increase in competitiveness, and growth of the company, making it sustainable and long-lasting. Sustainable management is not limited to the legal aspect, nor to creating value for the shareholder; rather, it seeks to generate sustainability, integral growth, and development in all aspects, thereby creating greater competitiveness for the organization (Díaz, 2013).

Hypothesis 8: Sustainable management directly and positively influences competitiveness.

Considering the stated hypothesis, the causal model seeks to represent the values that influence sustainable management and its impact on the competitiveness of retail companies in the region of Coquimbo, Chile (Figure 1).

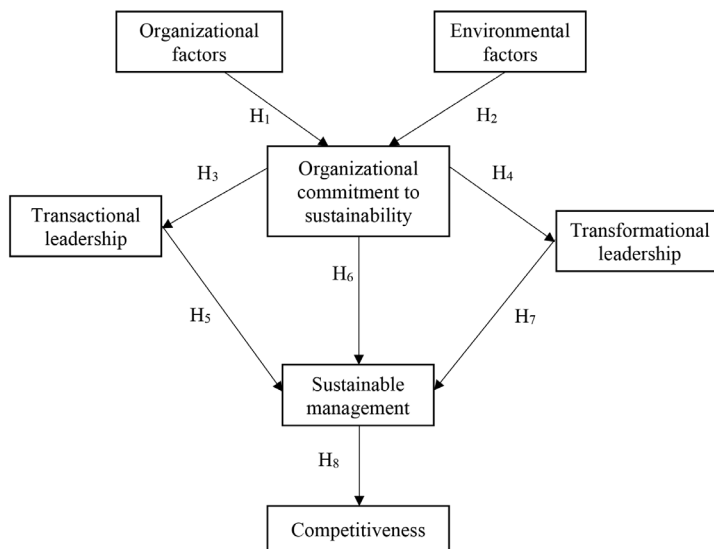


Figure 1. Causal model of sustainable management

Source: own elaboration

Methodology

The method used to gather information was a structured survey applied to supermarket workers of the Coquimbo region. This survey was constructed based on a compilation of literature, adjusted to the regional context, and validated by a panel of 5 experts. Table 2 presents the research datasheet. The evaluation instrument is annexed to this study in order to identify each of the indicators. Table 3 presents the sample composition.

Table 2

Research datasheet

Sampling type	Random sampling
Population size	5,863 workers
Confidence level	95%; $z=1,96$; $p=q=0,5$ (5% error and 95% confidence)
Sample size	361 workers
Analysis unit	Coquimbo Region, Chile
Information gathering method	On-site and online survey with 67 questions
Survey question type	Polytomic, Linkert type (1 to 5) scores and selections
Date of fieldwork	Between June 2017 and July 2017

Source: own elaboration

Table 3
Sample integration

Variable	Item	Percentage in sample (%)	Variable	Item	Percentage in sample (%)
Gender	Male	49.6	Position in the organization	Management	7.8
				Administrator	24.9
	Female	50.4		Deputy administrator	13.6
				Supervisor	14.8
				Area manager	12.2
Age range	18-25 years	24.3		Support personnel	26.7
Age range	26-35 years	39.9	Level of studies	Complete high school education	8.6
	35-45 years	6.6		Incomplete technical education	18.3
	46-56 years	29.1		Incomplete university education	28.0
Seniority in the company	Less than 1 year	20.5		Certified technical professional	12.1
	Between 1 and 5 years	24.9		University graduate	33.0
	Between 6 and 10 years	34.9			
	Between 11 and 15 years	19.7			

Source: own elaboration

Individual indicator reliability analysis

In order to determine the individual reliability of the indicators it was necessary to calculate the factorial loads, which is executable since the Kaiser-Meyer-Olkin (KMO) index was above 0.6 for each of the constructs, and Bartlett's test of sphericity was also significant ($p < 0.05$) (Espinoza, Sanhueza, Ramírez, & Sáez, 2015) (Table 4).

Table 4

Results of the statistical analysis: KMO, Bartlett's test, and factorial load

Construct	KMO	Significance of Bartlett's test	Indicator	Factorial load (λ)
Organizational factors	0.814	0.000	FO1	0.792
			FO2	0.904
			FO3	0.849
			FO4	0.842
			FO5	0.908
			FO6	0.846
			FO7	0.828
			FO8	0.870
			FO9	0.582
			FO10	0.838
			FO11	0.832
			FO12	0.835
Environmental factors	0.830	0.000	FE1	0.777
			FE2	0.775
			FE3	0.763
			FE4	0.727
			FE5	0.781
			FE6	0.920
			FE7	0.913
			FE8	0.872
			FE9	0.940
Environmental factors			FE10	0.869
			FE11	0.927
			FE12	0.936
			FE13	0.831
			FE14	0.844
Sustainable management	0.852	0.000	GS1	0.885
			GS2	0.916
			GS3	0.971
			GS4	0.916
			GS5	0.947
Transactional leadership	0.642	0.000	LTS1	0.821
			LTS2	0.807
			LTS3	0.789
			LTS4	0.824
			LTS5	0.804
			LTS6	0.850
			LTS7	0.832
			LTS8	0.802

Transformational leadership	0.729	0.000	LTF1	0.982
			LTF2	0.545
			LTF3	0.938
			LTF4	0.887
			LTF5	0.977
			LTF6	0.979
			LTF7	0.521
			LTF8	0.514
Organizational commitment to sustainability	0.622	0.000	CS1	0.890
			CS2	0.892
			CS3	0.915
			CS4	0.872
Competitiveness	0.871	0.000	C1	0.511
			C2	0.941
			C3	0.764
			C4	0.876
			C5	0.900
			C6	0.874
			C7	0.922
			C8	0.894
			C9	0.883
			C10	0.879
			C11	0.885
			C12	0.572
			C13	0.907
			C14	0.875

Source: own elaboration

This study accepted factorial loads with values above 0.6 (Moriano, Topa, Valero, & Lévy, 2009). This analysis eliminated the indicators FO9, LTF2, LTF7, LTF8, C1, and C12, considering the rest of the factors to be acceptable and significant to 95%.

Reliability analysis of the construct

In order to evaluate the reliability of the construct, it is necessary to consider internal consistency, which demands a Cronbach alpha greater than 0.7 (Forcael, Vargas, Opazo, & Medina, 2013). Additionally, the composite reliability index (IFC) is calculated, which considers the interrelations of the constructs, and has a minimum value of 0.7 (Vila, Küster, & Aldás, 2010). The results indicate that there is an internal consistency for each of the items that comprise the constructs (Table 5).

Convergent and discriminant validity

It is also necessary to evaluate the scales used (convergent validity), which is done by analyzing the average variance extracted (AVE). The recommended value is above 0.5, which establishes that more than 50% of the construct variance is due to its indicators (Forcael, Vargas, Opazo, & Medina, 2013). The fact that the constructs provide an AVE above 0.5 means that they have convergent validity (Table 5).

Table 5

Construct reliability and convergent validity. Indicators, Cronbach alpha, IFC, and AVE.

Construct	Cronbach alpha	IFC	AVE
Organizational factors	0.961	0.966	0.723
Environmental factors	0.969	0.973	0.724
Sustainable management	0.958	0.968	0.860
Transactional leadership	0.927	0.941	0.663
Transformational leadership	0.949	0.956	0.784
Organizational commitment to sustainability	0.913	0.939	0.793
Competitiveness	0.975	0.940	0.786

Source: own elaboration

Finally, discriminant validity indicates to what degree a construct is different from others that comprise the model. In order to prove this validation criterion, it is necessary to demonstrate that the correlations between constructs are lower than the square root of the average variance extracted (AVE) (Forcael, Vargas, Opazo, & Medina, 2013). Table 6 illustrates how all the values fulfill discriminant validity.

Table 6

Discriminant validity

Construct	C	CS	FE	FO	GS	LTS	LTF
Competitiveness (C)	0.887						
Organizational commitment to sustainability (CS)	0.845	0.890					
Environmental factors (FE)	0.830	0.860	0.850				

Organizational factors (FO)	0.851	0.865	0.767	0.851			
Sustainable management (GS)	0.827	0.795	0.734	0.794	0.927		
Transactional leadership (LTS)	0.595	0.692	0.754	0.794	0.641	0.814	
Transformational leadership (LTF)	0.816	0.829	0.756	0.843	0.870	0.717	0.885

Source: own elaboration

Results

Methodology for the structural equations model

Following the exploratory and confirmatory factorial analysis of the proposed model, the structural equations are used through the Partial Least Squares (PLS) method.

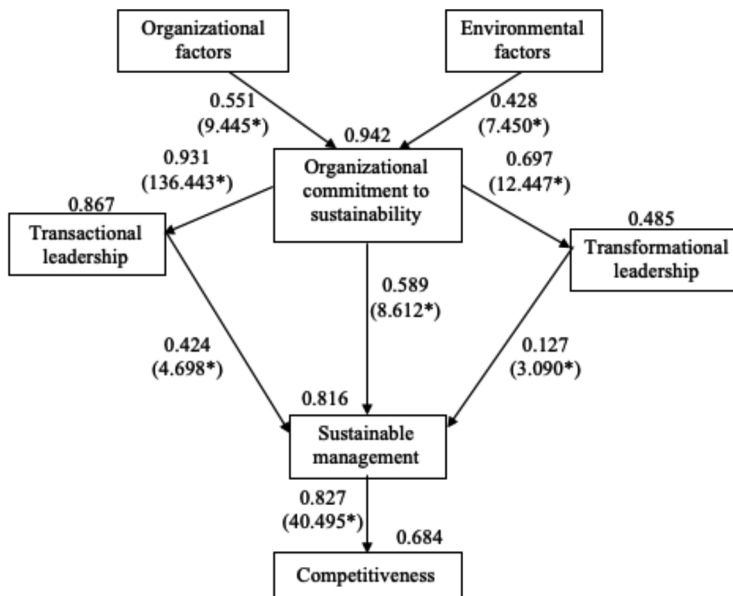
Causal relationship analysis and hypotheses contrast

The results presented in Table 7 indicate the existence of significant causal relationships provided by the standardized coefficient and the critical ratio (t-value) of the constructs with values above 1.96, thus verifying all eight established hypotheses. Figure 2 illustrates a graph of the results of this analysis.

Table 7
Study hypotheses contrast

Hypothesis symbol	Structural relationship (hypothesis)	Paths (β)	t-value (Bootstrap)	Contrast
H1 +	Organizational factors \rightarrow Org. commitment to S.	0.551	9.445*	Accepted
H2 +	Environmental factors \rightarrow Org. commitment to S.	0.428	7.450*	Accepted
H3 +	Org. commitment to S. \rightarrow Transactional leadership	0.931	136.443*	Accepted
H4 +	Org. commitment to S. \rightarrow Transformational leadership	0.697	12.447*	Accepted
H5 +	Transactional leadership \rightarrow Sustainable management	0.424	4.698*	Accepted
H6 +	Org. commitment to S. \rightarrow Sustainable management	0.589	8.612*	Accepted
H7 +	Transformational leadership \rightarrow Sustainable management	0.127	3.090*	Accepted
H8 +	Sustainable management \rightarrow Competitiveness	0.827	40.495*	Accepted

Source: own elaboration



*: t-value > 1.96

Figure 2. Structural model of sustainable management

Source: own elaboration

Validation of the structural model and goodness of fit of the model

The evaluation of the causal relationships proposed in the model uses two basic indices: the explained variance of the dependent variables (R^2), which must be greater than 0.33 to be moderate (Johnson, Hermann, & Huber, 2006); and the Stone-Geisser (Q^2) test, which determines the prediction quality of the structural model. The test serves as a criterion to measure the predictive relevance of the dependent constructs, and it is calculated using the Blindfolding technique. In the case of $Q^2 > 0$, it indicates that the model has predictive relevance, otherwise it does not have it (Chin, 1998). Table 8 illustrates how all the constructs fulfill this criterion.

Table 8

Model validity

Construct	R^2	Q^2
Organizational commitment to sustainability	0.942	0.700
Transactional leadership	0.867	0.528
Transformational leadership	0.485	0.349
Sustainable management	0.816	0.652
Competitiveness	0.684	0.492

Source: own elaboration

Additionally, the global goodness of fit (GOF) index is the most appropriate when using the PLS method (Esposito, Chin, Henseler, & Wang, 2010). The GOF of the analysis model is of 0.768 (Table 9), which demonstrates that it has a good fit in the structural model, thus meeting the empirical criterion that the goodness of fit must be between 0 and 1, with a higher value indicating a better index (Tenenhaus, 2008).

Table 9

Calculating the GOF

Construct	AVE	R2
Sustainable management	0.860	0.816
Transactional leadership	0.663	0.867
Transformational leadership	0.784	0.485
Organizational commitment to sustainability	0.793	0.942
Competitiveness	0.786	0.684
Mean	0.777	0.759
Square root	0.882	0.871
GOF		0.768

Source: own elaboration

Discussion

The first significant contribution of this study is that it proves with statistical reliability that sustainable management in retail companies in the region of Coquimbo, Chile, is generated through the systemic management of three variables: organizational commitment to sustain-

nability, transactional leadership, and transformational leadership. These variables explain 81.6% of the variance of the sustainable management in place in an organization, which in turn explains 68.4% of the variance in competitiveness.

The environmental and organizational factors explain 94.2% of the variance in organizational commitment to sustainability, which is a significant level according to Moriano *et al.* (2009). Organizational commitment to sustainability presents a statistically significant influence and confirms its positive influence on the generation or implantation of sustainable management, thus impacting on the competitiveness of the company. Therefore, retail leaders must implement programs to effectively and continuously communicate and promote their strategic framework, values, and organizational policies (organizational factors). Environmental factors such as empowering the community, government policies, and industry challenges have statistical significance and positively influence the commitment to sustainability. This entails that to implant sustainable management retail companies must know the demands and expectations of their customers, align themselves with the public policies of their country, and have capabilities to overcome the challenges of the industry in which they participate, given the trends of globalization. Thus, the company will be ready to make decisions that decrease strategic and operational risks, while also creating shared value that must be equitably distributed with all of its stakeholders.

Concerning the individual influence of the constructs on sustainable management, organizational commitment to sustainability has the highest positive impact on sustainable management, followed by transactional leadership and transformational leadership, with a standardized coefficient of 0.589, 0.424, and 0.127, respectively. Therefore, in order to have sustainable management in retail companies, their leaders must install an organizational structure that makes it possible to achieve growing results, assigning equitable rewards, focusing on developing the potential of its labor force, and making decisions that gradually allow for self-realization.

Conclusions

The competitiveness of retailers requires incentivizing competitiveness in their suppliers, developing clusters that enhance their value chain, generating a lower environmental impact, creating better access to specialized knowledge, and putting in place a leadership team based on values and achieving goals, which will build an organizational culture where sustainability is the cornerstone of the actions of all workers, integrally aligning the workforce to their

superiors. In this way, sustainable management will promote intangible assets such as brand value, differentiation, and competitive profit margin, variables that give competitiveness to retail companies.

The competitiveness of a company and the health of the stakeholders where it operates are strongly intertwined, which is why the creation of shared value is essential since philanthropy is insufficient. The focus of the strategies must consider their welfare proactively, although this is not yet a demand of the legal framework or existing corporate policies.

Customers and society must act in alignment with environmental and social values to produce sustainable companies. Managements must promote responsible consumption of their products, although this may imply lower income in the short-term, as this will promote the organizational commitment to sustainability, whose development requires more real actions associated with green marketing and the creation of shared value.

Retail company leaders and managers not only must know how to listen to the customer to innovate, but they must also listen, understand, and be sensitive to their environment, and with this relational capital influence the design of the company to increase commitment, and as a result, consolidate sustainable management.

Sustainable management requires the construction of an organizational commitment to sustainability, a greater relational link, and sensitivity to the environment, which is then expressed in the design and execution of the organizational architecture of the company. Additionally, managers must build an organizational architecture or work environment that stimulates sustainable work practices, which will be a reflection of the organizational commitment to sustainability, and thus lay the foundation for sustainable management. In this way, sustainable management will make corporate governance and its leaders work in alignment with the economy of the common good, assuming the challenge of increasing the economic value of the company, with social and environmental responsibility, integrating those three priorities into the business model, in a balanced and pertinent manner, to the reality of the company and the challenges of its industry.

Finally, the role of the state is of great importance since not only should it design a regulatory framework for the development of the environment and society, it should also create public policies for sustainability to incentivize private companies to be constant creators of shared value, a significant attribute of sustainable management.

References

- Araque, D. L. J., Estepa, J. M. S., & Uribe, A. F. (2017). Relación entre marketing interno y compromiso organizacional en Centros de Desarrollo Tecnológico colombianos. *Estudios Gerenciales*, 33(142), 95-101. <https://doi.org/10.1016/j.estger.2016.12.005>
- Arredondo, F. G. T., De la Garza, J. G., & Parra, J. C. V. (2014). Transparencia en las organizaciones, una aproximación desde la perspectiva de los colaboradores. *Estudios gerenciales*, 30(133), 408-418. <https://doi.org/10.1016/j.estger.2014.06.007>
- Ávila Foucat, V. S. (2017). Desafíos del sector primario y políticas públicas sustentables. *Economía Informa*, 402, 29-39. <https://doi.org/10.1016/j.ecin.2017.01.003>
- Botero, E. A. C., Acevedo, D. M. G., & Gómez, J. M. S. (2013). La competitividad financiera: un componente fundamental de la competitividad empresarial. *Contexto*, 2(1), 136-150. Disponible en: <http://revistas.ugca.edu.co/index.php/contexto/article/view/47>. Consultado 12/04/2017.
- Cabana, S. R., Cortés, F., Vega, D. L., & Cornejo, J. (2016). Modelo de negocio: análisis en empresas del sector construcción, región Coquimbo-Chile. *Ingeniería Industrial*, 37(3), 298-304. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1815-59362016000300008. Consultado 18/06/2017.
- Cabana, S. R., Cortés, F. H., Vega, D. L., & Cortés, R. A. (2016). Análisis de la Fidelización del Estudiante de Ingeniería con su Centro de Educación Superior: Desafíos de Gestión Educacional. *Formación Universitaria*, 9(6), 93-104. <https://doi.org/10.4067/s0718-50062016000600009>
- Carro-Suárez, J., Sarmiento-Paredes, S., & Rosano-Ortega, G. (2017). La cultura organizacional y su influencia en la sustentabilidad empresarial. La importancia de la cultura en la sustentabilidad empresarial. *Estudios gerenciales*, 33(145), 352-365. <https://doi.org/10.1016/j.estger.2017.11.006>
- Castelao, M. E. C. (2016). Las políticas públicas y su visión de la economía social y solidaria en Argentina. *Revista Mexicana de Ciencias Políticas y Sociales*, 61(227), 349-378. [https://doi.org/10.1016/S0185-1918\(16\)30032-0](https://doi.org/10.1016/S0185-1918(16)30032-0)
- Cencosud. (2016). Memoria anual Cencosud 2016. Disponible en: <http://www.svs.cl/institucional/mercados/entidad.php?mercado>. Consultado 21/04/2017.
- Contreras, O. E., & Rozo, I. R. (2015). Teletrabajo y sostenibilidad empresarial. Una reflexión desde la gerencia del talento humano en Colombia. *Suma de Negocios*, 6(13), 74-83. <https://doi.org/10.1016/j.sumneg.2015.08.006>
- Corrêa, C. R. (2011). *Cenários prospectivos e aprendizado organizacional em planejamento estratégico: estudo de casos de grandes organizações brasileiras* (Doctoral dissertation, Tese (Doutorado)). Rio de Janeiro: Instituto de Pós-Graduação e Pesquisa em Administração da Universidade Federal do Rio de Janeiro, COPPEAD/UFRJ. Disponible en: http://www.coppead.ufrj.br/upload/publicacoes/Tese_Claudio_Correa.pdf. Consultado 13/03/2017.
- Chen, C. C., Lee, C. C. y Lee, W. I. (2015). The relationship between internal marketing orientation, employee commitment, charismatic leadership and performance. *International Journal of Organizational Innovation*, 8(2), 67-78. <https://doi.org/10.1145/2781562.2781563>
- Chin, W., (1998). *The Partial Least Squares Approach to Structural Equation Modeling*. Modern Methods for Business Research. Pp. 295-336. Mahwah, NJ: Lawrence Erlbaum Associates, Publisher. Disponible en: https://www.researchgate.net/publication/311766005_The_Partial_Least_Squares_Approach_to_Structural_Equation_Modeling. Consultado: 15/04/2017
- De Mello, M. F. (2015). La importancia del liderazgo sostenible como una estrategia de las organizaciones. *Revista Ciencias Estratégicas*, 23(34), 209. <http://dx.doi.org/10.18566/rces.v23n34.a4>.
- Delgado, M., Pedraja Rejas, L., & Rodríguez Ponce, E. (2010). Estilos de Liderazgo y gestión de conocimiento en pequeñas empresas. *Técnica Administrativa*, 9(1) 1-13. Disponible en: <http://www.cyta.com.ar/ta0901/v9n1a4.htm>. Consultado: 15/04/2017

- Díaz Cáceres, N. (2013). De la Sostenibilidad al Valor Compartido: Gerencia Estratégica de los Grupos de Interés. *Daena: International Journal of Good Conscience*, 8(1), 159-176. Disponible en: [http://spentamexico.org/v8-n1/A13.8\(1\)159-176.pdf](http://spentamexico.org/v8-n1/A13.8(1)159-176.pdf). Consultado: 19/04/2017
- Duran, M. G. G., & Castañeda, D. I. Z. (2015). Relación entre liderazgo transformacional y transaccional con la conducta de compartir conocimiento en dos empresas de servicios. *Acta Colombiana de Psicología*, 18(1), 135-147. <http://www.dx.doi.org/10.14718/ACP.2015.18.1.13>
- Economía y negocios, (2015). Retail mueve en torno a US\$ 76.000 millones en 2014. Disponible en: <http://www.economiaynegocios.cl/noticias/noticias.asp?id=138812>. Consultado: 22/04/2017
- Espinoza, M., Sanhueza, O., Ramírez, N., & Sáez, K. (2015). A validation of the construct and reliability of an emotional intelligence scale applied to nursing students. *Revista Latino-Americana de Enfermagem*, 23(1), 139-147. <http://dx.doi.org/10.1590/0104-1169.3498.2535>
- Esposito, V., Chin W., Henseler J. y Wang H. (2010). *Handbook of Partial Least Squares: Concepts, Methods and Applications* 1st edition, Berlin: Springer-Verlag Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-32827-8>
- Falabella, (2016). Memoria anual Falabella 2016. Disponible en: <http://www.svs.cl/institucional/mercados/entidad.php?mercado>. Consultado: 19/02/2017
- Febles A. J., & Oreja R. J. (2008). Factores externos e internos determinantes de la orientación de la cultura estratégica de las empresas. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 14(1), 13-32. [https://doi.org/10.1016/S1135-2523\(12\)60009-4](https://doi.org/10.1016/S1135-2523(12)60009-4)
- Ferdig, M. A. (2009). Sustainability leadership relational model and practices. Omaha, NE: Sustainability Leadership Institute. Accessed June, 15, 2015. Disponible en: <http://www.sustainabilityleadershipinstitute.org/atomic.php>. Consultado: 25/04/2017
- Forcael, E., Vargas, S., Opazo, A., & Medina, L. (2013). Rol del ingeniero civil en la sociedad chilena contemporánea. *Revista de La Construcción*, 12(2), 72-87. <http://dx.doi.org/10.4067/S0718-915X2013000200006>
- Fundación PROhumana, PNUD Chile (2002). Los chilenos Opinan: Responsabilidad Social de las Empresas. Análisis de la encuesta MORI sobre Responsabilidad Social Corporativa. Santiago, Chile: Ediciones PROhumana. Abril-2002. Disponible en: <http://prohumana.cl/documentos/documentoafrica2002.pdf>. Consultado: 21/02/2017
- Fred, D. (2017). Conceptos de administración estratégica. *Boletín Científico de las Ciencias Económico Administrativas del ICEA*, 5(9). <https://doi.org/10.29057/icea.v5i9.2096>
- Gallardo, D. V. (2006). El Compromiso Con El Desarrollo Sostenible: Principios De Ecuador. *Cuadernos de Economía*, 25(45), 205-222. <http://dx.doi.org/10.15446/cuad.econ>
- García, J. J. O., Lara, J. D. D. L., & de la Parra, J. P. N. (2017). Propuesta de un modelo de medición de la competitividad mediante análisis factorial. *Contaduría y Administración*. <https://doi.org/10.1016/j.cya.2017.04.003>
- Hargreaves, A., & Fink, D. (2007). 7 principios de un liderazgo sostenible. *Padres y Maestros/Journal of Parents and Teachers*, (310), 17-21. Disponible en: <http://revistas.upcomillas.es/index.php/padresymaestros/article/view/1659/2597>. Consultado: 26/04/2017
- Hermosilla, D., Amutio, A., de Costa, S., & Páez, D. (2016). El Liderazgo transformacional en las organizaciones: variables mediadoras y consecuencias a largo plazo. *Revista de Psicología del Trabajo y de las Organizaciones*, 32(3), 135-143. <http://dx.doi.org/10.1016/j.rpto.2016.06.003>
- Hernández, A., Ortega, D., & Garzón, M. (2011). Diseño de un sistema de gestión estratégica para la Alcaldía Local del Sur-Oriente del distrito de Barranquilla. *Dimensión. empresarial*, 9(1), 41-54. Disponible en: <https://www.researchgate.net/publication/256484594>. Consultado: 27/04/2017
- Ibarra, M. J. P., Soto, K. J. G. & Delgado, P. Z. Z. (2015). El liderazgo para la sustentabilidad; Un acercamiento nuevo a la forma de dirigir una organización. *Catedra de contabilidad y sustentabilidad*. Disponible en http://www.cumex.org.mx/index.php/catedras/index.php/catedras/index.php?option=com_content&view=article&layout=edit&id=284%22. Consultado: 28/04/2017

- INE, (2016). Series mensuales desde enero de 2014 a la fecha. Disponible en: <http://nuevoportal.ine.cl/estadisticas/economicas/comercio?categoria>. Consultado: 05/03/2017
- Johnson, M., Hermann, A., & Huber, F. (2006) The Evolution of Loyalty Intentions. <http://dx.doi.org/10.1509/jmkg.70.2.122>
- Matteo, C. A. (2014). Gerencia y Desarrollo Sustentable: un enfoque de ética y responsabilidad social. CLIC: Conocimiento Libre y Licenciamiento, (8). Disponible en: http://convite.cenditel.gob.ve/files/2015/01/ArticuloRevistaCLIC_n8_4.pdf. Consultado: 08/05/2017
- Mendoza, A. I. M., García, B. R. R. y Xochitototl, V. N. (2014). Modelamiento estructural del compromiso organizacional, liderazgo transformacional y variables de resultado en personal que labora en escuelas públicas de educación básica en el distrito federal, Mexico. Disponible en: <http://congreso.investiga.fca.unam.mx/docs/xix/docs/3.08.pdf>. Consultado: 12/05/2017
- Moriano, J. A., Topa, G., Valero, E., & Lévy, J. P. (2009). Identificación organizacional y conducta “intraemprendedora”. *Anales de Psicología*, 25(2), 277–287. Disponible en: <https://digitum.um.es/xmlui/bitstream/10201/14440/1/moriano.pdf>. Consultado: 14/05/2017
- Nelson, J. (2011). Corporate sustainability leadership at the edge. university of cambridge, programme for sustainable leadership. cambridge uk. Disponible en: https://sites.hks.harvard.edu/m-rcbg/CSRI/CPSL_the_edge_Jane_Nelson.pdf. Consultado: 10/04/2017
- Ortega, M. J. R., Villaverde, P. M. G., Moreno, J. J. J., & Requena, G. P. (2008). Diferenciación en marketing y resultado de la empresa: análisis contingente y configuracional. *Esic market*, (129), 67-124. Disponible en: https://www.esic.edu/documentos/revistas/esicmk/080114_144404_E.pdf. Consultado: 10/04/2017
- Peláez-León, J. D., Solarte, M. G., & Rodríguez, A. R. A. (2014). La relación estratégica entre gestión humana y la responsabilidad social empresarial: Avances de una explicación en un caso colombiano. *Suma de Negocios*, 5(11), 15-28. [https://doi.org/10.1016/S2215-910X\(14\)70016-3](https://doi.org/10.1016/S2215-910X(14)70016-3)
- Ramos, V. I., & Maya, J. I. (2014). Sentido de comunidad, empoderamiento psicológico y participación ciudadana en trabajadores de organizaciones culturales. *Psychosocial Intervention*, 23(3), 169-176. <http://dx.doi.org/10.1016/j.psi.2014.04.001>
- Rivas Pardo, P. (2013). América Latina Tendencias y perspectivas del nuevo siglo. Ángel Soto y María Ignacia Matus (comps.). *Estudios internacionales (Santiago)*, 45(175), 141-146. <https://doi.org/10.5354/0719-3769.2013.27386>
- Sánchez, P. V. (2011). Empresas sustentables. ¿cómo entenderlas? Disponible en: <https://www.guioteca.com/rse/empresas-sustentables-como-entenderlas/>. Consultado: 27/04/2017
- Sarmiento del Valle, S. (2010). Gestión estratégica: clave para la responsabilidad social de las empresas. *Dimensión empresarial*, 8(2), 24-37. Disponible en: <https://www.researchgate.net/publication/277265517>. Consultado: 28/04/2017
- Silva Peralta, Y., Olsen, C., Pezzi, L., & Sanjurjo, N. (2016). Liderazgo transaccional y transformacional de voluntarios jóvenes y adultos de Mar del Plata. *Psicoperspectivas*, 15(3), 146-157. <http://dx.doi.org/10.5027/psicoperspectivas-Vol15-Issue3-fulltext-769>. Consultado: 28/04/2017
- SMU, (2016). Memoria anual SMU 2016. Disponible en: <http://www.svs.cl/institucional/mercados/entidad.php?mercado>. Consultado: 19/02/2017
- Tenenhaus, M. (2008). Component-based structural equation modelling. *Total Quality Management & Business Excellence*, 19, 871–886. <http://dx.doi.org/10.1080/14783360802159543>
- Thompson, A., Peteraf, M., Gamble, J. & Strickland, J. (2012). *Administración estratégica. México: McGRAW – HILL Interamericana Editores S.A.* Consultado: 19/03/2017
- Varela, F. (2012). Liderazgo en el Sector Público. Aproximaciones y Desencuentros con el Sector Privado. *Administración Pública*, Universidad de Santiago de Chile. Consultado: 21/03/2017
- Velásquez V., P. (2017). Desarrollo sustentable y la gerencia en Venezuela. *Contextualizaciones latinoamericanas*, número 16, enero-junio. Disponible en: <http://www.revistascientificas.udg.mx/index.php/CL/article/view/6903/5918>. Consultado: 03/04/2017

- Vera Martínez, J. (2008). Perfil de valor de marca y la medición de sus componentes. *Academia. Revista Latinoamericana de Administración*, (41). Disponible en: <http://www.redalyc.org/pdf/716/71611842007>. Consultado: 15/04/2017
- Vidal Ledo, M. J., & Sánchez, A. M. P. (2016). Formación en Valores. Conceptos éticos y tecnológicos, métodos y estrategias. *Infodir (Revista de Información para la Dirección en Salud)*, 10(18), 81-94. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-21412016000400016. Consultado: 19/03/2017
- Vila, N., Küster, I., & Aldás-Manzano, J. (2010). Desarrollo y validación de escalas de medida en Marketing. *Análisis de Datos Multivariable*, 1–22. Disponible en: <https://www.researchgate.net/publication/267725602>. Consultado: 02/04/2017
- Walmart, (2016). Memoria anual Walmart Chile 2016. Disponible en: <http://www.svs.cl/institucional/mercados/entidad.php?mercado>. Consultado: 19/02/2017

Annex

SURVEY

Survey on sustainable management and its impact on retail companies (supermarkets)

This survey aims to identify the variables that cause the existence of sustainable management (managements whose decisions consider the environmental factor to be relevant) and to evaluate the impacts generated to the benefit of the company, customers, workers, and other relevant stakeholders.

General instructions:

- select the option you consider most suitable
- answer all the questions as carefully as possible

1. Individualization of the official

1.1 Gender: Male _____ Female _____

1.2 Age range:

18 - 25 years	26 - 35 years	36 - 45 years	46 - 56 years	56 years or older
---------------	---------------	---------------	---------------	-------------------

1.3 Position in the organization:

Manager	Administrator	Deputy administrator	Supervisor
Area manager	Support personnel		

1.4 Seniority in the organization:

Less than 1 year	Between 6 and 10 years	Between 16 and 20 years
Between 1 and 5 years	Between 11 and 15 years	More than 20 years

1.5 Schooling

Complete high school education	Incomplete technical education	Incomplete university education	Certified technical professional
University graduate			

2. Company size

Small company (1-50 workers)	Medium company (51-200 workers)	Large company (more than 201 workers)
---------------------------------	------------------------------------	--

3. Please indicate the extent to which you agree with the following statements regarding the organizational factors of your company that affect the organizational commitment to sustainability:

1. Strategic framework	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
------------------------	---------------------	----------	----------------------------	-------	------------------

1.1 In the company, all workers know the organizational mission and vision.

1.2 The company defines its vision, mission, and objectives in alignment with the sustainable development of society and the wellbeing of its customers.

1.3 The company has a strategy to contribute equitably to its external collaborators (suppliers, community, etc.) to face challenges regarding sustainability and social inequity.

1.4 The tasks I perform in my organization align with the objectives established in the mission and vision of the company.

2.Values	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
2.1 In the company, the values that guide our actions have been clearly defined and are known.					
2.2 In the company, its values guide us to act and make decisions that consider the wellbeing of the organization and stakeholders (suppliers, customers, workers, community, etc.).					
2.3 The values of my company expressly establish and incentivize developing appropriate ways of relating to the environment.					
2.4 The values identify the commitment to the environment, and customer and staff satisfaction.					
3. Corporate policies	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
3.1 The company promotes a healthy, participatory, transparent, respectful, equitable, and communicative work environment.					
3.2 The company promotes the formation of unions or forms of worker organization to improve quality of life and dialogue between parties.					
3.3 The company has a policy of selection and hiring of personnel that prioritizes people who have environmental values and respect for the environment.					
3.4 The company has an environmental policy that motivates us to act in a responsible manner both socially and environmentally.					

4. Please indicate the extent to which you agree with the following statements regarding the environmental factors that affect the organizational commitment to sustainability:

Community empowerment	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
4.1 The company has mechanisms to serve consumers and the community in general, aimed at receiving their complaints and suggestions regarding our environmental behavior.					
4.2 The company has and executes mechanisms to solve conflicts of interest with the community.					
4.3 The company is constantly looking to identify what the new requirements of the community are, regarding environmental protection and sustainability.					
4.4 The company has investments in and incentives for the community in order to strengthen relationships and collaborative work.					
4.5 The company has and executes mechanisms to follow up and evaluate the environmental impact we cause with the operation and distribution of our products and services.					
5. Government policies	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
5.1 The company concerns itself with complying with current Chilean legislation regarding possible negative environmental impacts.					
5.2 The company concerns itself with complying with Chilean legislation regarding community involvement.					
5.3 The company is aware of the environmental regulations that control it and establishes the procedures and processes to comply with them.					
5.4 Government policies stimulate the sustainable development of the economic activity of the company.					

	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
6. Globalization trends					
6.1 Companies in the sector (in which your company participates) concern themselves with implanting sustainability strategies in their business model to meet new environmental expectations of their stakeholders.					
6.2 The company is informed and prepared for the impact of national policy changes regarding the environment and sustainability.					
6.3 Companies in the sector allocate funds for investment in research and development of environmentally friendly products and services.					
6.4 The company considers the social pressures or demands of the community regarding the environment when offering its products and services.					
6.5 The company concerns itself with promoting technological development that consolidates a green label in order to generate a competitive advantage in its sector.					

7. Please indicate the extent to which you agree with the following statements regarding aspects that generate organizational commitment to sustainability in your company

	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
7.1 There is concern on behalf of the managers for expressing their satisfaction when workers achieve the proposed environmental goals.					
7.2 The company promotes an ecological paradigm to its workers to contribute to the development of the environment, and thus generate a work environment that contributes to my loyalty to the environmental values of the company and improve my performance.					

7.3 The company not only concerns itself with achieving economic profitability but also with getting all of its stakeholders (community, customers, workers, suppliers, etc.) to commit to its environmental values.

7.4 The company has an equitable rewards system that encourages us to increase our productivity, aligned with environmental behavior.

8. Please indicate the extent to which you agree with the following statements regarding attributes of sustainable management (managers whose decisions consider the environmental factor to be significant) in your company

8. Sustainable management	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
---------------------------	---------------------	----------	----------------------------	-------	------------------

8.1 The company promotes the generation of stable cooperation networks, aimed at fomenting environmental, economic, and social development in local communities.

8.2 The company encourages the sustainable competitiveness of suppliers (regardless of size), in order to include them in our value chain (operations and internal services), to promote our sustainable results.

8.3 In the company, Trisectorial relationships (company, community, and state) have been established in order to resolve the different environmental demands of the stakeholders (community, customers, workers, suppliers, etc.).

8.4 In the company, we have designed and implemented projects of inclusion and social investment in the community, which promote the economic and environmental value of the companies and these collaborators.

8.5 There are productivity increases at the company level, solving social and environmental problems that limit the quality and eco-efficiency of its operations.

9. Transactional leadership	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
9.1 The leaders in my company constantly concern themselves with reducing the pollution generated by their operations.					
9.2 The leaders in my company are efficient decision-makers and help, with our support, to reduce environmental and operational risks within the organization.					
9.3 The leaders in my company concern themselves with optimizing energy use to achieve greater profitability.					
9.4 The leaders in my company drive us to increase the value of products and services by decreasing their environmental impact and by giving incentives (tangible or otherwise) for their achievements.					
9.5 The leaders in my company aim to eliminate all activities that generate extra costs and do not increase the environmental value of the company.					
9.6 The leaders in my company have implemented energy efficiency procedures or technologies.					
9.7 The leaders in my company have implemented measures to reduce quantities and increase efficiency in water consumption.					
9.8 The company has leaders who encourage and promote the development of sustainable everyday actions for our wellbeing, that of our customers, and society.					

10. Transformational leadership	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
10.1 The leaders in my company promote creating value within the organization, encouraging an environmentally conscious organizational reinvention, led by the employees themselves.					
10.2 The leaders in my company know where and how to invest in building customer loyalty and generate pro-environmental partners (contributing with their ideas to improve and innovate our company) and a competitive advantage adaptable to the environment.					
10.3 The leaders in my company pass on to their employees the key environmental values of the company, as they represent our development and the sustainable development of the organization.					
10.4 The leaders in my company encourage their employees to be innovative, creative, and to seek solutions to social and environmental problems on their own.					
10.5 The leaders in my company consider the environmental and ethical consequences caused by the decisions implemented.					
10.6 The leaders in my company promote HR policies that consolidate in us a culture of commitment based on values for the care of the environment and the development of communities.					
10.7 The leaders in my company have implemented environmental practices with internal customers.					
10.8 The leaders in my company have transferred good sustainability practices to suppliers and the relevant community to drive their economic development.					

11. Please indicate the extent to which you agree with the following statements regarding the factors that result from sustainable management (managers whose decisions consider the environmental factor to be significant) in your organization, which cause and generate competitiveness

11. Brand value	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
11.1 The company brand has an outstanding environmental reputation, which contributes to its leadership in the sector.					
11.2 The company brand relates to sustainable consumption and living, which gives it competitiveness.					
11.3 The company brand influences customers, suppliers, and future workers to prefer us as a company to work with or relate to.					
11.4 The company brand relates to corporate and environmental sustainability.					
12. Corporate differentiation	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
12.1 The company concerns itself with offering environmentally friendly products.					
12.2 The company continuously innovates its products and services to deliver a value proposition whose green seal gives it competitive advantages in the sector.					
12.3 The company marketing uses its environmental commitment as a factor of differentiation from the competition in the sector.					
12.4 The products marketed by the company can remain in the market despite the changes it may undergo.					
12.5 The company can differentiate itself from its competitors using environmental requirements as an opportunity.					

13. Competitive profit margin	Completely disagree	Disagree	Neither agree nor disagree	Agree	Completely agree
13.1 Environmentally friendly technology and processes contribute to the profit margin and growth of the company over its competitors.					
13.2 Corporate sustainability contributes to improving the economic and financial results of the company.					
13.3 Marketing environmentally friendly products gives the company growing and greater demand than its competitors.					
13.4 The company concerns itself with being efficient, improving productivity, reducing costs in carrying out activities, and contributing to maximizing results by sustainably optimizing the allocated resources.					
13.5 The economic results and the profit margins of the company improve by implementing sustainable actions, and associative or inclusive strategies with the stakeholders (customers, suppliers, workers, community, etc.).					