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The Impact of Dynamic Balanced Scorecard in Knowledge-Intensive Organizations' Business Process Management: A New Approach Evidenced by Small and Medium-Size Enterprises in Latin America

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Abstract

Dynamic Balanced Scorecard (DBSC) is an effective business performance management control tool for dealing with business uncertainty, performance monitoring, evaluation and forecasting. DBSC has been proposed and utilized extensively over the years as an effective tool to manage and control the dynamics of business processes (BP) and their performance. However, there is little evidence of its application in knowledge-intensive (KI) organizations and how they can develop and enhance key aspects of their business processes, such as product-service systems innovation, and sustainability, for example. Moreover, the literature does not mention nor does it provide a vision or a DBSC model in cases where business process management (BPM), linked to knowledge creation and organizational transformation initiatives, are factored in the DBSC model. Hence this article explores this vein and aims to demonstrate the advantages of DBSC in this type of scenarios, with stark contrast of failed organizations of the past, particularly in small and medium-size enterprises (SME). Most of the private sector in developing countries like Chile is comprised of SMEs, which thrive and seek to grow sustainably adhering to a global economic trend. The DBSC model being shown here illustrates SMEs strategy, which reveals how intrinsic characteristics of knowledge-intensive organizations can foster sustainability and innovation in BPM.

Keywords: Dynamic Balanced Scorecard (DBSC); Model; Knowledge-intensive Organizations; Business process management; Small and Medium-Size Enterprises (SME).

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Introduction

Traditional Balanced Scorecard (BSC) methodology cannot keep pace with the swiftly moving agenda of today's fast changing competitive environment of modern enterprises everywhere amidst growing uncertainty (Nowotny et al., 2013). Such an uncertainty comes from several fronts as it occurs in Chile, where economic, social and political unrest are literally in the making. Not only strategy maps are not useful anymore but become outdated by the time they are put into practice and, on top of that, priorities amongst the business process management's perspectives are also rapidly changing (Nowotny et al., 2013; Purnama & Subroto, 2016). Therefore, there came to be the need for a more dynamic and proactive method of management control systems that could keep up with such a pace and uncertainty, in an ever more knowledge-intensive environment. At the same time there is the need, more important now than ever before, to help management anticipate events before they occurred (Nowotny et al., 2013; Purnama & Subroto, 2016). The latter also imposes the need for organizations to become more knowledgeable and smarter, more agile, and flexible, as they become used to more knowledge-intensive environments, where work evolves fast and solutions to satisfy requirements are needed yesterday. Thus, studies of integrating the Balanced Scorecard and system dynamics to carry through performance management get more and more attention (Santos et al. 2001). Dynamic Balanced Scorecard compensates for the weaknesses of the Balanced Scorecard's oversimplified causal relationship and dynamics. Moreover, it is helpful for implementing the organization's strategic performance management (Hubbard, 2009). In today's digital transformation and big data analytics world, DBSC organizations are heavily investing in enterprise-wide information systems and performance scorecards intended to improve strategic decision making amidst the myriad of changes and uncertainty present in just about every sector of the economy. However, there is a need for better evidence that using these technologies systematically improves organizational performance. Traditionally, companies have judged their health by how much money they make. Financial measures are definitely important, but they only give you part of the picture. They focus on the short-term, and what you are trying to build is an organization that stands the test of time. Thus, the name "balanced scorecard" comes from the idea of looking at strategic measures in addition to traditional financial measures to get a more "balanced" view of performance (Hubbard, 2009). However, notwithstanding its prevalence and widespread industry acceptance, the BSC framework in its classical form, as proposed by its founders, has certain deficiencies and shortcomings that often come as obstacles to its effective implementation (Fowler & Hope, 2007). These are:

- Deficiency 1: A cause-effect diagram, used to depict the strategy map, expresses the causality in a unidirectional manner.

- Deficiency 2: A cause-effect diagram, while showing the cause-effect linkages, does not take into consideration the time varying impact of these influences.

- Deficiency 3: A BSC provides no mechanism for validating the performance measures specified.

These key deficiencies and shortcomings have far-reaching implications on the effectiveness of the BSC both as a tool management control system as well as an implementation framework for enterprise strategies (Saha, P. (2005).

Aim of Study

This study aims to analyse and divulge the impact of dynamic balanced scorecard in knowledge-intensive organizations' business process management by studying the evidence shown and the factors behind the impact of small and medium size enterprises (SME) strategies on business success in the new economy of Latin American countries. Based on the theoretical framework presented in this article, and the new strategic approach that emerges, evidenced by small and medium-size enterprises in Latin America, the following hypotheses were designed to meet the aim of this study.

Hypotheses

H1. Dynamic Balanced Scorecard (DBSC) is an effective business performance management control tool for dealing with business uncertainty, performance monitoring, evaluation and forecasting, which when applied in knowledge-intensive (KI) organizations can help develop and enhance key aspects of their business processes, such as product-service systems innovation, and sustainability.

H2. Although the literature does not mention nor does it provide a vision or a DBSC model in cases where business process management (BPM), linked to knowledge creation and organizational transformation initiatives, these vision and model do exist, particularly when new business trends of SME in Latin America are examined.

H3. The vision and model already mentioned become significant when factored in the DBSC model impacting the company's business performance, particularly in small and medium-size enterprises (SME).

Materials and Methods

Research design

The research study was conducted using both qualitative approach and methodology based on a series of factors and traits exhibited by and identified in SME, which when compounded by the literature research and market analysis, helped to build the theoretical framework

presented. Despite the fact that the literature does not mention nor does it provide a vision or a DBSC model in cases where business process management (BPM), linked to knowledge creation and organizational transformation initiatives, are factored in the DBSC model, the research study aims to demonstrate the advantages of DBSC in this type of scenarios, with stark contrast of failed organizations of the past, particularly in small and medium-size enterprises (SME). This is particularly important when one realises that most of the private sector in developing countries like Chile is comprised of SMEs, which thrive and seek to grow sustainably adhering to a global economic trend. The DBSC model being shown here illustrates SMEs strategy, which reveals how intrinsic characteristics of knowledge-intensive organizations can foster sustainability and innovation in BPM.

Developing Dynamic Balanced Scorecards

In *Encyclopedia of Information Science and Technology, First Edition* (pp. 837-843); IGI Global Journals (see https://www.igi-global.com/journals/) one reads that cause-effect linkages are viewed as one-way in nature, thus emphasizing one-way thinking. This unidirectional approach leads to difficulty in reliable simulations. While linkages from non-financial to financial measures are shown, feedback loops depicting the impact of financial on non-financial measures is absent. Not only that, but it is also assumed that both cause and effect occur in the same place and time, thus not provisioning for delays in causality, thereby missing the temporal/dynamic complexity. Hence, a static cause-effect diagram makes it difficult to identify "good" predictor metrics, thus often failing in its prediction accuracy and, even worse, it gives a false or misrepresented reality. Thus it is found that the traditional five aspects of the BSC and their implications necessitate enhancement with a systems thinking/system dynamics approach, to develop the dynamic balanced scorecard (DBSC). Table 1 illustrate this.

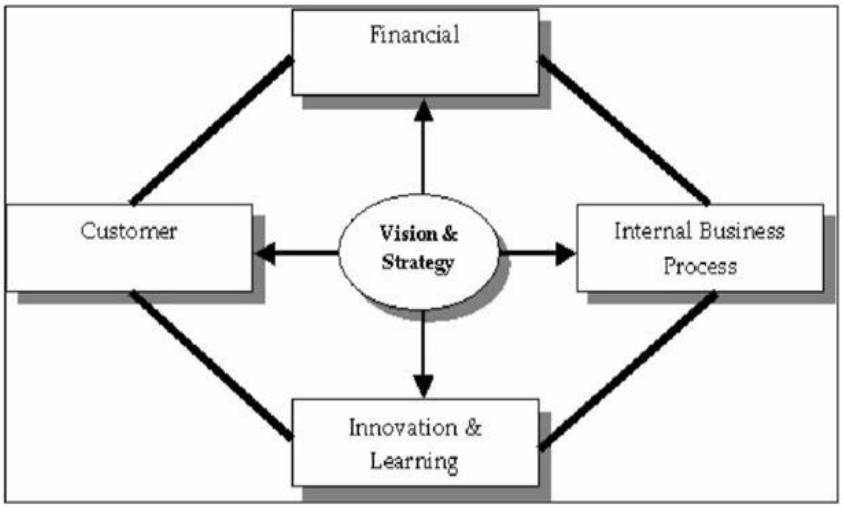

Figure 1. Basic structure of a the BSC performance measurement system. Source: own elaboration

Table 1. Resources, measures, flows and impacting factors

Resources	Performance Measures	Inflows & Outflows	Units of Inflows & Outflows	Impacting Factors (Illustrative)
Revenue	Total revenue (Dollars)	Revenue added Revenue lost	Dollars / quarter	Sales, Competitors performance, New products, Price
Customer base	Individuals (Count)	Customers acquired Customers lost	Individuals / quarter	Sales effort, Price, Demand, Quality, Word of mouth
Products	Number of products (Count)	Products added Products retired	Products / quarter	Development effort, Staff skills, Demand
Overall quality	Defects (Defects Per Million Opportunities)	Increase in defects Reduction in defects	Defects Per Million Opportunities / quarter	Product quality, Process quality, Quality improvement effort
Staff	Number of staffs (Count)	Staffs added Staffs depleted	People / quarter	Salaries, Growth opportunities, Firm performance
Market reputation	Index	Increase in reputation Reduction in reputation	Index value / quarter	Word of mouth, Competitors perception, Customer performance

Source: Developing Dynamic Balanced Scorecards http://what-when-how.com/information-science-and-technology/developing-dynamic-balanced-scorecards/ (23, December, 2019)

Pearson correlations were performed between excessive social media use, family relationship, parenting mediation and social media integration for the Snapchat and Instagram scales. The results in Table 2 show that Snapchat and Instagram were the most common social media platforms among Saudi adolescents; therefore, the correlations and other subsequent analyses were performed only on these two social media. The relation between excessive social media usage and the two elements of family relationships (cohesion and expressiveness) was significant and negative, whereas a significant positive correlation was found between social media addiction and conflict. Excessive social media use was also significantly positively associated with both components of social media integration. In contrast to these results, there were no meaningful associations between excessive social media use and the various types of parenting mediation. There were no significant findings in terms of correlations between family relationships and parenting mediation strategies except a negative relationship between conflict and restrictive mediation. Additionally, parenting mediation techniques were.

Dynamic Balanced Scorecard (DBSC) in Knowledge-intensive Enterprises

Dynamic balanced scorecard in knowledge-intensive organizations is one of the most rapidly evolving areas in the global industrial environment today. Over a long history, it has gone

from an ideology to a strategic initiative embedded into daily operations (Chen & Liang, 2011). Yet in order to have sustainable economic, environmental and social practices in the enterprise, DBSC must be aligned with business performance management (BPM) practices. BPM practices have, no doubt, come a long way from a not so distant past and today it is managed proactively and globally as part of international corporate strategies involving large operational excellence initiatives. Long past is the time when the lemma was anything goes so long as the deal is closed. Those days when such business practices abounded are becoming more and more criticized nowadays, earning the scorn and disgust of people everywhere. In a not so distant past, however, it used to be enough just having a business that had a good return for the investment made, and that was in check legally, without worrying about being fair, sustainable or socially responsible to others, especially to the local community. It is still fresh in the memory of thousands, the irresponsible and unsustainable business practices and operations management cases that drew world attention, such as the environmental disasters of such notorious companies as the Union Carbide case in Bhopal, India (http://www.theatlantic.com/photo/2014/12/bhopal-the-worlds-worst-industrial-disaster-30-years-later/100864/) or the Exxon Valdes oil spill disaster in Alaska (http://www.evostc.state.ak.us/?FA=facts.QA) More recently, there is the case of Volkswagen cheating on emissions tests deceiving the automobile market and the authorities in charge of controlling car emissions (http://www.theguardian.com/sustainable-business/2015/oct/13/how-companies-can-keep-the-faith-on-climate-change). In Latin America, unfortunately, things have played differently at times due to corruption and self-serving positions of key executives and regulating authorities. There is ample evidence of present and past cases of enterprise mismanagement, irregular business practices, outright negligence and corruption scandals as well. The cases of Petrobras and Odebretch enterprises, a giant in the construction sector is but a recent example of this long string of bad business practices. In fact, bad business practices in Latin America are an endemic problem in our societies accustomed to bribery at all levels, to sneak a sealed envelope under the table, to the 'patronage' of election campaigns and political parties, which produce dark alliances between governments and consortia.

Thus, in the past, companies could operate polluting the environment almost without a problem, affecting workers, the local community or defrauding their customers with fraudulent and unethical business practices and management styles. There are enough cases in history, not only in Chile but elsewhere in the world that illustrate this dramatic truth. Today, however, the business landscape has changed substantially worldwide, with a new business paradigm acting as a bastion of such a change. Such paradigm is anchored in two great pillars that have driven said change: enterprise sustainability (ES) and innovation. Today there is a new trend in business management where sustainable enterprises are active players in the creation of wealth and greater social fairness (Vives, 2006). Companies, particularly small and medium size companies (SMEs) in Chile and elsewhere in Latin America are now following this emerging trend [Pietrobelli & Rabellotti, 2006]. The Chilean national statistics bureau (*Instituto Nacional de Estadística* or INE), in its annual survey termed *Encuesta*

Industrial Anual (ENIA), employs as a criterion for SME classification based on the number of employees occupied by the enterprise [http://www.ine.cl/canales/form_electronicos/imprimir.php]. The ENIA considers as small enterprises those which have a number of employees ranging between 10 and 49 and as middle-size companies those that employ between 50 and 199 workers.

Other organizations, such as universities, are also seeking to develop their competitive advantages by taking sustainability and innovation coupled with ethics as pillars of their competitive strategy (Lozano, 2011). This not only is true in developed countries but also in developing countries like Chile where there is a large number of companies and other organizations with programs and policies in this area. Today there is a new order in the creation of business competitive advantages: innovation, ethics and sustainability, closely linked and intertwined in Chilean enterprises, a fact that is replicated elsewhere in the region as well (Lee et al. 2012; Kantis et al. 2002). The concepts of business fairness and sustainability are also intertwined, and are setting a strong message in businesses everywhere, which seems unstoppable and irreversible (Perrini & Tencati, 2006). This is especially true under the paradigm shift brought about by sustainability and innovation being fostered and promoted at the government policy level (Montecinos, 2006) as well as in the private business agenda in Chile, and how it is reshaping management practice and styles of SMEs altogether (Monsalves, 2002).

The paper is organized in five sections; section one offers a brief introduction, with selected literature review on enterprise sustainability (ES) and business performance management (BPM), along with some important cases cited as illustrative examples of the new trend in business. Section two presents methods, aims and scope of the study as well as the three hypotheses. Section three discusses the roadblocks to ES and business performance management alignment. Section three addresses the need to build dynamic capabilities based on knowledge so as to build up learning through knowledge-intensive transformation initiatives, designed and aimed to support ES, innovation in business management by means of the transformative learning perspective (Cranton, 1994; Mezirow, 1997). Section four elaborates of the roadblocks to enterprise sustainability and business performance management alignment and section five offers a brief discussion of some of the key issues behind this business transformation embraced by so many SMEs in Chile and Latin America. Finally, section six presents the conclusions and some recommendations for future research.

Enterprise sustainability and business performance management

The concept of ES emerged timidly at the beginning and then evolved throughout the 1970s and 1980s to become what we know today, an area closely linked to BPM. Sustainability was formally described by the 27 principles of the Rio Declaration on environment and development in 1992 (Wirth, 1994). On the other hand, sustainable companies seek to

minimize negative impacts on the community and enhance positive ones in their operations and relations with third parties including local and government authorities (Kang et al. 2010). However, when looking closely at the situation in Chile in terms of having government policies geared towards ES, still the main ingredient is missing: no policies exist for promoting ES and incentive-based innovation whatsoever; something that is in sharp contrast with Asian and European countries where modern legislation specifically incorporates a uniform set of rules, regulations and incentives to move in this direction, as part of the country's development axis and society. Therefore, it is necessary that regulations and guidelines in the form of public policies are set forth to encourage sustainably structured businesses and BPM innovation to safeguard social and environmental as well as non-environmental aspects that are vital for society's wellbeing. This is also a way of advancing our development as emerging societies, just as modern nations have done already (Veenhoven, 2008). Driving this is the integration of enterprises sustainability and innovation, marked by strong ethics values which fuel wealth and societal wellbeing. It is centered on the responsibility that society has to move towards a real and serious sustainable development, one which will inherit a better society for future generations to come—a more just and equitable society for all regardless of social class. Such policies would ultimately be aimed at attaining a society where everyone matters, not only those who buy the company's products and services but the community at large, thus sustaining the societal system (Hurtado, 2004). Likewise, when looking at changes in business operations as a result of globalization, countries in the Asia Pacific market of which Chile is part are pressured by strong drivers to advance in sustainability. Zhu and Sarkis (2004) investigated Chinese enterprises efforts in supply chain management to improve their environmental performance while safeguarding economic growth fueled by their solid business performance.

Figure 2. Above is a depiction of the virtuous cycle of enterprise sustainability and superior business performance strategies. Not in vain knowledge is at the center. Source: Own elaboration

Roadblocks to enterprise sustainability and business performance management alignment

At present Chilean enterprises of all sectors are deficient when it comes to sustainability and innovation indicators tied with business performance management measures. It is not uncommon to find a lack of clear and distinct business performance management indicators to measure both: sustainable business development and innovation (Figge et al. 2002). In principle, none of the three objectives of sustainable business development (economic, environmental and social) is currently being measured. Moreover, this ought to be measured in the context of the company's businesses and their approach to the local community with compatible parameters. Usually the business performance indicators being used are linked to economic and financial benchmarks, and rarely focus on other aspects that benefit the customer and the community in particular. Hence business performance management is mostly measured by traditional economic indicators leaving sustainability and innovation out of the equation. Likewise, equity/fairness in business practice is also largely ignored or at best occupies a single sentence in the company's vision and mission statement. In some cases, (Ferreira & Otley, 2009; Bateman, 2000) this is determined on the basis of social parameters only, and others on the basis of purely economic principles but divorced from sustainability altogether. Sometimes environmental sustainability indicators are also present (Keeble et al. 2003) to measure business performance but usually are set in physical and biological terms rather than socioeconomic ones.

Innovation, on the other hand, is hard to find in Chilean enterprises since it is not a priority by any means. Often seen as risky and uncertain in terms of its deliverables, it is usually regarded as an eccentricity by some in enterprise performance measurement, unlike what occurs in developed countries (Holliday et al. 2002). For example, a report by EUROSTAT (2008), states that 26% of innovative firms were engaged in co-operation with other enterprises, universities, public research institutes, suppliers, customers and competitors in the EU-27. In the Member States, the most common co-operation partners were suppliers followed by customers (respectively, 17% and 14% of innovative firms), while the least common co-operation occurred with universities and research institutions (9%) (Mention, 2011). When looking at OECD statistics on enterprise innovation, one finds that it is mostly product and process innovation in industrialized first world countries and more organizational and marketing innovation in developing countries like Brazil or India. Colombia, for example, has very little organizational and marketing innovation but more on product innovation, unlike Brazil which has very little of this type of innovation (http://www.oecd.org/innovation/inno/inno-stats.htm). As a result, clear obstacles arise when trying to align enterprise sustainability and business performance management in the context of innovation and ethics/fairness in business practices. Despite the fact that enterprise sustainability, technological and managerial innovation and company ethics stand out as

drivers of current business performance and sustainability, this misalignment constitutes a hurdle at the present time that must be resolved.

- ***Enabling the alignment between enterprise sustainability and business performance management***

Indeed, ES and BPM encompasses every area of the business value chain. All business activities comprising the value chain, namely product development, procurement, manufacturing, maintenance, sales, delivery, and customer service are to be aligned with ES strategy and driven by BPM strategy. Both strategies ought to be aligned and in tune with one another, working together in order to secure success. ES has several faces and different approaches coexist today depending on the nature of the business and the priorities in the management's vision. For some companies the effort is put on reducing energy use and carbon footprint or else, in more sustainable waste management. For others is about designing eco-friendly products and processes, while for companies operating in more hazardous and risky environments like oil and gas, nuclear energy and chemical industry sectors, as well as the mining and steel industries, it has much more to do with reducing hazards in the use of heavy machinery, and operational risks with environmental, health and safety issues in processes, and so on. Yet, being convinced of the benefits of pursuing a ES strategy and the need for this is only the first step towards realizing those benefits. Sustainability is good for business, but like any other potentially effective practice, environmental performance management requires a disciplined framework to capture latent value while avoiding inefficiencies. Indeed, it is value protection, extraction and creation that lie at the heart of environmental management plans designed to achieve compliance-led risk mitigation, efficiency-led cost reductions, innovation-led revenue generation and overall competitive advantage. Successfully designing and implementing a plan of this type not only ensures a company's license to operate, but sets it on the path to sustainable growth. Ultimately, the challenge of delivering value through environmental performance management can be understood as a four-stage process: identifying the right environmental strategies and initiatives, quantifying their value and impact, prioritizing specific actions, and maximizing the value opportunity for the entire company. In such a scenario, each area of the business ends up with its own systems, data models, compensation structures, management systems, leadership, and more. These activities have a positive local force, but it's difficult for the organization as a whole to capitalize on the benefits or effectively communicate the improvements to the market and external stakeholders. The question arises then: how to bridge the gap between ES and BPM to reach a successful outcome? Well, in light of the above it is found, upon close scrutiny, that there exists a structural misalignment between these two that has to be addressed and dealt with. Each of the two essential components: ES

and BPM indicators are considered and addressed at different levels of enterprise performance evaluation system (Perrini, & Tencati, 2006) and therefore result in a misalignment that hinders success. Furthermore, sustainable business development depends, at least theoretically, on business performance management systems (BPMS) that encompass and align with the three pillars of sustainable development: economic, environmental and social sustainability. This is so because the benefits of such an alignment between the two must be felt in every realm of society. Therefore, in today's enterprise scenario it is impossible to quantify these as compatible parameters because when it comes to assessing such an alignment and the drivers that go behind it, such enterprise performance indicators are simply not available. This situation can be illustrated by Figure 3 in which sustainability and innovation are drivers of sustainable business performance in a transformative organizational learning and improvement cycle. Each of them no doubt has an impact on business performance management albeit in a different way. Furthermore, in order for the model to work they ought to be aligned with the four most prevalent business perspectives in successful enterprises today (Kaplan & Norton, 1998).

- ***Building dynamic capabilities: how SMEs enable enterprise sustainability driven by sustainable business development and management practices***

The models depicted in Figure 2 and 3 are formulated in light of widespread current business practices that are, for the most part, common to very many SMEs today. From this theoretical integration one is drawn to find new contributions and insight for guiding the sustainable development of enterprises and organizations everywhere. This approach to enterprise sustainability and innovation– pioneered largely by SMEs in Chile and other countries in Latin America– has a profound impact on business performance management in today's enterprise world (Teece, 2007). SMEs have accomplished this feat based on management and business values, which articulate and synergize themselves to find ways not only to grow the business but to increase value for the customer and for the community (Klewitz & Hansen, 2014). They do so with concrete actions and company policies which are supported by budget plans, managerial actions and strategic day-to-day decisions. It is safe to assume that this transformative learning trend will eventually catch up to all sectors of the nation's economy reaching companies of all sizes and sectors, thus becoming a standard business practice. The transformative learning (Cranton, 1994; Mezirow, 1997) and growth perspective, which is behind enterprise innovation, is fostered by the development of the sustainable enterprise (Peredo & Chrisman, 2006; Teece, 2007), wherein sustainable business development drives corporate sustainability. In order to develop sustainable businesses performance management(SBPM), it is also necessary to specify the scope of the concept itself and its motivation beyond purely environmental and ethical concerns.

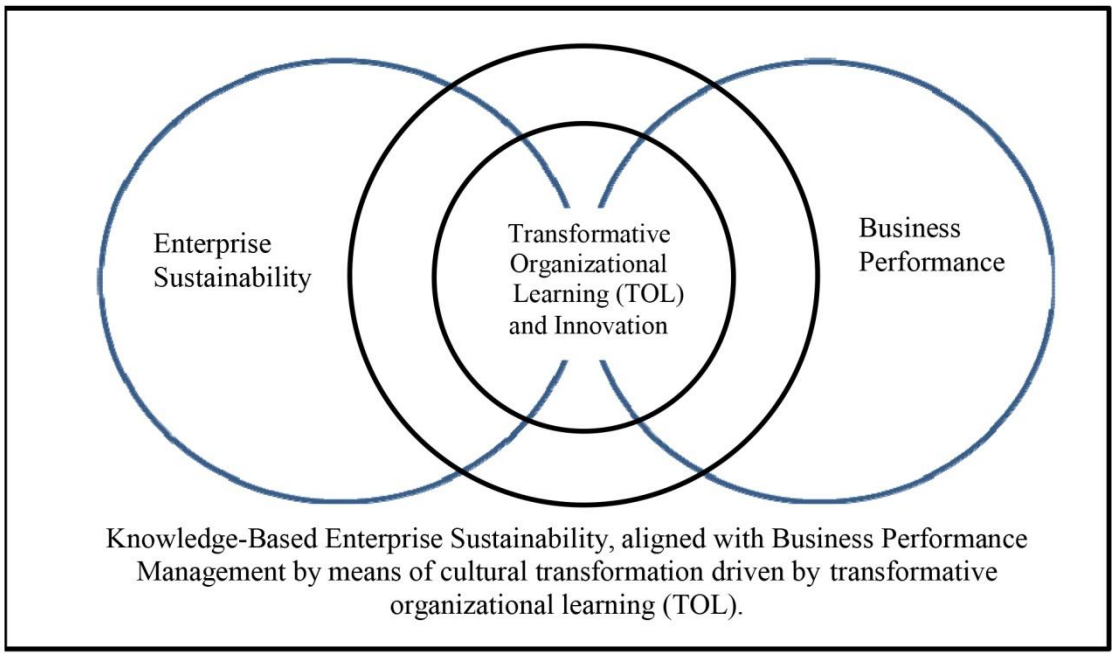

Figure 3. Enterprise sustainability management (ESM) aligned with business performance management (BPM) by means of cultural transformation driven by transformative organizational learning or TOL. (Source: Own elaboration)

The trend that SMEs appear to exhibit in Chile shows that ES is aided by a distinct approach to business innovation and fairness, which involve a new corporate vision altogether. One that must be based on shared values that also incorporate the community and the relation with the customer which exhibit a seal of corporate 'social ethics'. This new vision and ethics profoundly redefines the nature of the company, since under this new scheme, the business ought to contribute to the integral transformation of the community towards a greater wellbeing. This is particularly important in the context of Latin America due to its long history of inequity in the distribution of wealth (Vives, 2006), a wide range of socio-economic problems, corruption and other issues that characterize the region. These, along with many other asymmetries that plague Latin American countries, point to a pervasive problem of a fair distribution of wealth: the majority of the population lives with an average income that does not allow for many dreams to come true (Rodríguez, 2003). Traditionally the enterprise ethics discussion has focused on the definition and practice of corporate values (Schuman, 2006), rather than on how to bring down to nuts and bolts the institutionalization and consolidation of ethics/fairness in the business practice. These have also been absent in the definition of the business itself, the company vision, mission and the business strategy.

Upon close examination of the SMEs transformation and learning capabilities in Chile, one realizes that companies everywhere have had to reinvent themselves over the years to find new niches and sources of competitive advantage, developing new strategies to compete and

to be successful. For this to occur they have to adequate and adapt their organizations, performance management systems, organizational structures and cultures to address and fully incorporate these new strategies (Valenzuela & Maturana, 2016; Valenzuela-Oyaneder, & Maturana-Valderrama, 2017). As a matter of fact, this is never truer than in the case of SMEs, especially in Chile, and in their strategic and managerial development which in Chile has been an example for the region. However, upon examining the literature, very little is found if anything that addresses such strategic transformation and learning capabilities and their role in SMEs' good performance management. Dynamic capabilities are all over the business processes and strategies of SMEs today. It is a fact based on what companies are doing to address the various problems, opportunities and challenges of today's industries and markets, and how to tackle these within the new strategic framework when it comes to performance management. A good example of such performance management systems is found in the viniculture and wine industry in Chile, where such practices are utilized in performance management systems (PMS) in today's world (Valenzuela & Maturana, 2016) (Rigby and Bilodeau, 2011).

- ***Dynamic capabilities that support ES, knowledge acquisition and innovation in BPM by means of the transformative learning perspective***

At the core of the organizational transformation that empowers ES, there are first and foremost, the dynamic capabilities which support and foster ES through knowledge acquisition and innovation in BPM practices. This is done structurally by means of the transformative learning perspective. This new paradigm shift in enterprise strategy requires learning and developing new, untapped dynamic capabilities (Helfat et al. 2009; Zollo & Winter, 2002), that can change the way enterprises do business altogether. This shift calls for a distinct vision and values of the company, which are reinforced by the sustainability and innovation seal, along with strong company ethics (Laszlo, 2008). This is important since it is a departure from the almost generalized, seldom questioned way of expressing the business commitment with regard to social and environmental problems that affect the community. This, along with company ethics has traditionally been characterized by isolated programs that simply are there to show that there is intention and 'good will' to help the community, but without walking the extra mile, and truly tackling the underlying problems and the relationship that exists with the development of the business. Thus, the strategic formulation of sustainability and innovation must be translated into clear objectives, programs and performance management indicators involving the synergy of key areas of the organization (Valenzuela & Maturana, 2016). For the latter to occur, a transformative learning experience (Cranton, 1994; Mezirow, 1997) of the organization as a whole is necessary wherein the enterprise undergoes the required skills that can enable the paradigm shift, in order to sustain

the alignment between ES and PMS. Thus, it is clear then that enterprise leadership is called to take action and insist on fostering sustainability, innovation, company ethics and values as strongholds of this new paradigm shift in the enterprise (Fergus & Rowney, 2005). This in turn will be part of the strategic definition of the company's competitive edge and create the conditions to make it part of the core values and corporate culture, which are common to all successful companies everywhere.

Transformative learning and knowledge acquisition at the core of dynamic capabilities

Transformative learning (Cranton, 1994; Mezirow, 1997) is the process of effecting change in a given population or target group (e.g. an organization), based on a given frame of reference. This frame of reference may be built on new company vision, new principles and policies, for example a new approach towards the customer and the community, or to the environment so as to improve the perception of sustainability by consumers and the community and with it, to improve business performance (Valenzuela & Maturana, 2016). Hence enterprise sustainability and innovation aligned with BPM require that companies transform their frames of reference through the critical reflection of their role in society. Not only it is important to be successful in a given market but also to be perceived as sustainable and worthy of doing business with, by not only protecting the environment and having ethical business and managerial practices, but also caring for customers and for the community at large. This is what has been the emblem of SMEs business practices. Today we have many models of organizational change that are geared towards achieving greater competitiveness and better business performance (Barki & Pinsonneaul 2005), however they are divorced from the enterprise sustainability issue altogether. Moreover, they do not make the linkage with innovation, much less recognize innovation as an enabler of enterprise sustainability. Rather, these models see enterprise sustainability as an issue that must be treated within the realms of corporate social responsibility (CSR), something that falls quite short of what ES truly is. Many of these models coincide with the sense of urgency proposed by the current literature (Bruch et al. 2005), however, they do not take into account the individual and collective obstacles inherent in the organization nor do they account for the emergent criticisms that people have to deal with at the time of introducing such organizational changes (Yorks & Marsick, 2000). Therefore, it is necessary first to understand the conditions and circumstances that an organization may be facing at a particular point in time before moving forward with enterprise wise type of change.

In Figure 3 above we show a diagram depicting the four most prevalent business perspectives that characterize and support enterprise sustainability, and innovation and how they all impact enterprise business performance. The customer and community perspective is supported by a code of ethics and fairness of the enterprise in its relationship with its

customers and the community. Learning and growth perspective supports and fosters innovation in every way possible, something which helps business growth as well as enterprise sustainability. In fact, the sustainable business development and the learning and growth perspectives are mutually dependent and intertwined, as support each other. Finally, the financial perspective is sustained by a sustainable and ethical business practice which, in the end, closes the circle by supporting an ethical and fair relationship with the company's customers and the community in which it is inserted. Hence both sustainability and innovation have direct impact on business performance management once enterprise sustainability and business performance management are aligned with and supported by the four business performance perspectives before mentioned.

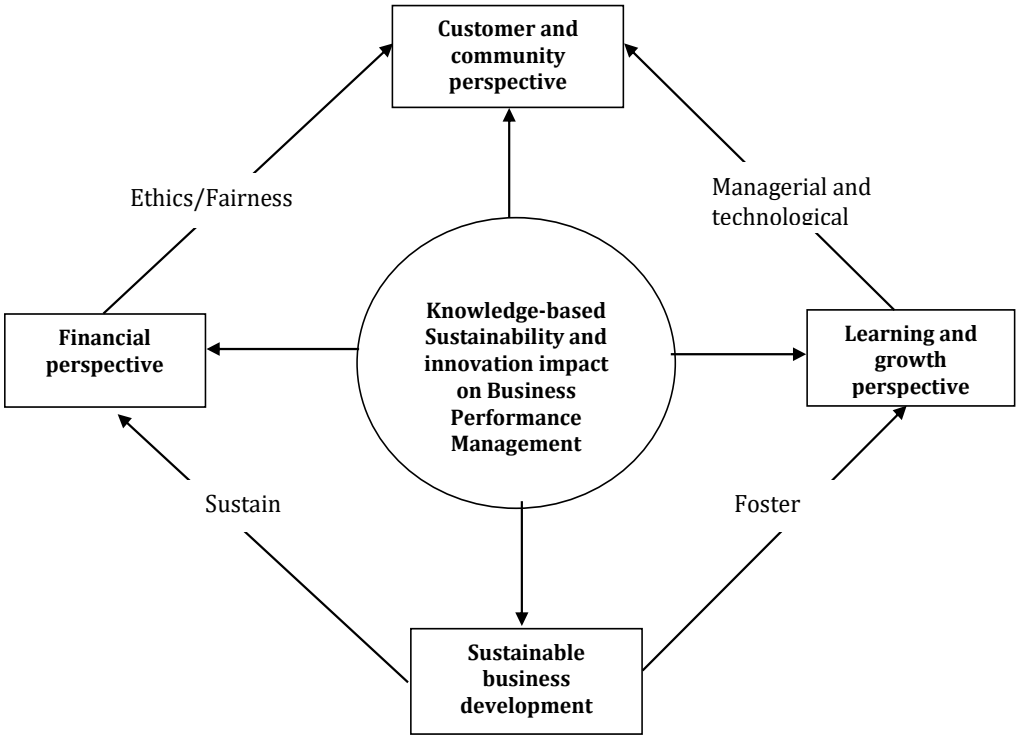

Figure 4. Above we have knowledge-based sustainability and innovation impact on the enterprise business performance management aligned with the four most prevalent business perspectives of successful Chilean SMEs today. (Source: Own elaboration)

Discussion

Much has changed since globalization and the internet took over the business world 20 years ago and companies everywhere, especially small and medium sized enterprises (SMEs) have not remained on the sidelines regarding these changes (Condon, 2004; O'Toole, 2004; Schaltegger & Wagner, 2006; Lichtenthaler, 2009). They have had to adapt and transform

themselves to compete and thrive. Chile in particular, being a country with an open door policy to free trade and globalization, has seen many such changes, especially in the SMEs sector. Such changes denote a consistent trend with similar patterns in various enterprises from widely different industry sectors, and how they have transformed their business models, strategic management and redefined their economic value chain, extending their customer base and value outreach well into the communities in which they operate. Particularly in Chile, SMEs, many of which are successful start-ups, have adopted entirely different approaches to strategic management than do large firms, enabling them to practically reinvent the way business is done in different industries, changing the SMEs landscape in the process. Their strategy is aimed at achieving something similar than what Blue Ocean strategy (Kim, 2005) proclaims, whereby costs are reduced to stay competitive while increasing value to customers and the community. Thus SMEs are winning over business from larger firms and occupying niches that are simply out of reach for other firms. The framework is supported by a number of successful Chilean SMEs operating in a local and international context, offering a new perspective on strategic management of enterprise sustainability. The latter rests chiefly on innovation, ethics and transformative organizational learning (Benn et al. 2014) as drivers of enterprise sustainability and innovation, aligned with solid, no-nonsense business performance management. Therefore, in light of the above, a new argument emerges that moves away from the traditional debate on what the scope of enterprise sustainability is, transcending the corporate social responsibility (CSR) arena (Balmer et al. 2007).

The problems of understanding complex system behavior and the challenge of developing models to capture such behavior are apparent in the field of performance measurement. Organizations are faced with conflicting goals of maximizing financial and non-financial returns. Existence of multiple measures in a scorecard addressing such conflicting goals increases the structural complexity of the measurement system and makes it difficult to predict its behavior. Enhanced with use of systems thinking, balanced scorecard practice can be made both richer and more meaningful with the incorporation of the dynamic perspective of strategies and performance measures. While BSCs do assume the systemic nature of businesses, they fail to explicitly address the systemic thinking in its original form. This brings forth serious shortcomings in implementation. Synergizing system thinking and balanced scorecards provides a practical way of addressing these shortcomings. There is no doubt that enterprise sustainability and innovation are making a dent on the competition for those SMEs that have adopted this new business trend. These, along with fairness/equity are erecting as pillars of the development of modern societies, especially in emerging economies of Latin America, where sustainable small and medium enterprises are active community players in the creation of value for their customers and for their stakeholders, while at the same time, bringing greater social fairness into society. However, there are obstacles and hindrances to institutionalizing such a change in the way companies go about their businesses.

A possible approach to address such hindrances is offered by transformative organizational learning (TOL). It is only by creating an environment of TOL and growth that truly sustainable enterprises emerge and thrive. The number of enterprises particularly SMEs in Chile which have embraced this new path to sustainable competitiveness is already large and keeps growing. The approach is tailored around an "everyone wins" situation, where new enterprise culture; better, more fair business policies and organizational values are the key to instrumentalize this new concept which impacts both the customer and the local community directly.

Indeed, one can expect further convergence between ES and BPM strategies as well as an increased focus on the community as an overall business management framework in the years to come. The elements that constitute this new organizational strategy are centered on new business principles, value management and ethics acting as enablers of this paradigm shift. While the latter may make all the sense in the world in today's environment, the problem is that such new principles and values may sometimes conflict with individual and groups within the organization whose interests may seem threatened, giving rise sometimes to unforeseeable obstacles and hindrances. It is hard to march at a good pace when facing a strong headwind. For this reason, managerial leadership should exercise its role and be a driver of OT. Thus the management of these new organizational values and principles should be guided by a transformative learning process within the organization, in a way that is fully coherent with the management of business performance and enterprise sustainability. The transformative learning process allows understanding issues behind the enterprise culture, such as values, actions and decisions which, at times, may seem hard to visualize and manage. When the paradigm shift is institutionalized and in full force, as can be seen in many SMEs operating today in Chile, the alignment between enterprise sustainability and business performance management becomes possible and with it comes a superior competitive edge. One that has allowed so many SMEs in Chile and in other parts of Latin America to achieve superior business performance while helping foster wealthier and happier communities. This in spite of the competition of larger firms, and in the process, being able to create a unique relation with their customers and the communities they serve.

Conclusions

Based on the qualitative approach, methods and analysis presented therein plus the evidence gathered by the case study, it is concluded that hypotheses H1 to H3 are amply justified and confirmed. Indeed, as the evidence clearly shows in SME in Latin America, distinct, yet empowering trend and vision are in place which sustain the model being exhibited here. Moreover, as opposed to large corporations where things are managed differently, in SMEs is easier to embrace this new paradigm shift as it is part of their fabric; it is woven in their strategic models of doing business rather than being something extraneous that must be

incorporated to the organization from outside of the enterprise. As a matter of fact, when there are conditions and circumstances present which poise considerable obstacles and hindrances to carry out the organizational change necessary for enterprise sustainability and innovation to align and thrive in the enterprise business performance arena, it may be necessary to analyze first how such a change may be best served both in terms of the individual and group transformative learning. In other words, the organizational culture and values must change before attempting to implement and institutionalize the paradigm shift of doing business, placing company values and ethics at the forefront of the enterprise sustainability agenda tied to business performance management. Such effort should be at the heart of the organization transformative learning process as it entails changes in the mentality and behavior of the individuals and groups within the organization itself (Barki & Pinsonneaul 2005). Transformative learning refers to the process through which people transform their mental frames of reference in order to incorporate new values and ethics principles into a group for example, and this is a demanding and cumulative effort that unlike the SME (in which this paradigm shift is part of their successful business model) must be championed by managerial leadership geared towards a cultural shift on business ethics (Pirson & Lawrence, 2010). On the one hand, the company must redefine its priorities and core values, not so much in terms of social and environmental responsibility, as it has done in the past, but rather to assume a commitment to its customers and to the community as part of its strategic and daily concern. Another is the commitment to the communities that impacts the business itself making it thrive. Enterprise sustainability, innovation and transformative learning are to set the guidelines and actions for managing a successful and sustainable business performance in the enterprise. This requires an approach which is tailored to the enterprise itself, it is not a one size fits all deal. Each company has to find its own formula and apply it a way that best suits its strategic goals and business objectives, as SMEs in Chile have been doing. But such an approach has a common ground regardless of the management style and personal seal of the company: they all have a transformative organizational learning scheme operating within the organization, albeit not always explicit; and they also have a strong ethics commitment and shared values embraced by all stakeholders towards both the customer and the community. Transformative learning through knowledge acquisition, draws attention to those frames of reference which become obsolete and create hindrance for the development and institutionalization of the sustainable enterprise. The transformation occurs when existing frames of reference change, and people change by learning new frames of reference. Hence, taking enterprise sustainability and innovation as fundamental values and core competences of the enterprise, involves expanding its transformative capacity to include the community's impact. Sanford (2011) points out that a responsible company is that which is characterized by undertaking business in harmony with all those who contribute directly or indirectly to the product or service. This includes the environment, the customer, the community and investors, among others interested parties.

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