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# Implementation of Management Models: A Case Study of Performance of Socioenvironmental Management at a Brazilian Public Energy Company

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#### **Announcements:**

- <u>CIK 2020 Conference</u> May 20<sup>th</sup> 24<sup>th</sup> 2020, UNINOVE University, São Paulo, Brazil
- CIK 2019 Conference April 17th 21st 2019, MIT, Cambridge, USA
- CIK 2018 Conference March 4<sup>a</sup> 7<sup>a</sup> 2018, ESCA and UM5, Casablanca and Rabat, Morocco
- CIK 2017 Conference April 14th 16th 2017, MIT, Cambridge, USA
- CIK 2016 Conference March 15<sup>th</sup> 17<sup>th</sup> 2016, The American University in Cairo, Egypt
- CIK 2015 Conference April 24 26th 2015, Harvard University, Cambridge, USA
- <u>CIK 2014 Conference</u> January 9th 11th 2014, Hult International Business, Dubai, UAE
- CIK 2012 Conference October 15<sup>a</sup> 17<sup>a</sup> 2012, Hult International Business, Cambridge MA
- Guidelines for submission to CCJ <a href="http://www.cyrusik.org/ccj/submission-guidelines/">http://www.cyrusik.org/ccj/submission-guidelines/</a>

## CYRUS CHRONICLE JOURNAL (CCJ): Contemporary Economic and Management Studies in Asia and Africa

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We invite authors to submit their papers and case studies to <a href="Editor@Cyrusik.org">Editor@Cyrusik.org</a>. We will have a quick turn-around review process of less than two months. Every volume will be composed of about 5-8 papers and case studies. The first volume was published in the May of 2015. A selected number of papers submitted to the CIK conference will be double-blind reviewed for inclusion in *THE CCJ*. We also have accepted papers from emerging economies about other regions of the world. We intend to have special issues on themes that are within the scope of Journal. Also, we will have invited guest issues.

#### THE CCJ: An imprint of the CYRUS Institute of Knowledge (CIK)

#### Background:

This is a historical time for the mentioned regions, and The Cyrus Chronicle intends to offer what is most urgently needed. There is no question that organizations and businesses that are capable of analyzing and applying advanced knowledge in management sciences and development are in high demand, and especially during transitional periods. It is an unusual time in the target regions and the world, a time which requires active intellectual participation and contributions. It is the era of revolution in terms of communication, technology and minds for billions of people. It is a time for intellectuals, entrepreneurs, and philanthropists to help enlighten minds and therefore enrich the quality of life for millions. It is a time to focus intensely on the regions' historical characteristics, achievements, human and natural resources, and its significant deficit in development, management sciences, and democracy. CIK's vision, "to cultivate the discourse on human capital potentials for better living," is the appropriate response to current challenges, and the journal is a platform for sharing the perspectives of scholars and practitioner with a wider audience.

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CYRUS is committed to developing knowledge that positively contributes to the life of the world citizens, especially, the target regions. CIK is a charitable, educational, and scientific organization that has been in operation since 2011. It is a secular and nonpartisan organization that has many scholars and practitioner as member.

For more information on the Institute, please contact: <u>Editor@Cyrusik.org</u>; <u>Sagafinejad@loyola.edu</u>; <u>Nasgary@Cyrusik.org</u>. *CYRUS Institute of Knowledge* (CIK), Box 380003, Cambridge, MA 02238-0003, USA

## Editor's Introduction

Since inception in 2012, the *Cyrus Institute of Knowledge* has held five annual meetings. Three years ago, we published the first volume of its flagship journal, *Cyrus Chronicle Journal (CCJ): Contemporary Economic and Management Studies in Asia and Africa in conjunction with the 2016 annual conference.* 

The Institute has had seven successful international conferences since its inception. These conferences have been hosted at institutions (MIT, Harvard, Hult) in the United States and internationally (Hult - UAE, American University in Cairo, and ESCA in Morocco). Several institutions of higher education collaborated and supported these conferences. Please see CIK website for information about these institutions. We greatly appreciate their support! CIK 2020 Conference will be held at UNINOVE University, São Paulo, Brazil from May 20 -24<sup>a</sup>. You are invited to participate.

Generally, conference participants come from about 15 countries and 35 institutions, organizations, and companies. Please see <u>CIK website for detail</u> in this regard. For some plenary sessions we had up to 150 participants. The best papers presented at these conferences have traditionally been accepted for publication in the Journal, with additional articles by prominent scholars.

The acceptance rate of *CCJ* is generally less than 20%. Our aim is to publish the highest quality papers after they pass through multiple review process. CIK colleagues and conference participants have proposed and suggested special issues of the journal which is based on core topics (i.e., entrepreneurship, innovation, ethics, and sustainable development) and/or country specific ones. Therefore, we welcome your articles which meet these characteristics. We already have several papers about Iran.

Now we welcome you to the fourth issue (CCJ.V4). The journal intends to cover scholarship pertaining to emerging economies in Asia, Africa, and other emerging economies. Scholarship dealing with these regions tend to be either ignored or misunderstood, and there are limited outlets for scholars who work in these countries to share their scholarly outputs. Focusing on these two continents will help researchers from both developed countries as well as these two continents - which together account for the largest portion of the world population and growth. The *CCJ* intends to fill these gaps. An examination of our mission may shed some light on this question. The primary purpose of the journal is four-fold:

- 1. To share and promote knowledge of economic, management, and development issues facing countries of Asia and Africa and other emerging markets. Focusing on assessment, evaluation, and possible solutions help advance countries in this which has the largest world habitats. Development challenges are global; virtually all countries face challenges concerning economic development, sustainability, food and water, population and environmental degradation. Yet no country gains by shunning opportunities that globalization can provide, with the possible exception of a few countries whose leaders lack a full understanding of the opportunities that globalization can offer. To take advantage of such opportunities, knowledge is the primary requisite. And this journal aspires to make a contribution to this body of knowledge.
- 2. To encourage the generation and dissemination of knowledge by local scholars whose access to mainstream academic outlets may be limited. There are many scholars from academic, public and private sector organizations whose first-hand knowledge of problems and solutions is not being shared for lack of an appropriate outlet for dissemination. The *CCJ* seeks to provide an opportunity for spreading such knowledge.
- 3. To focus on countries that span the northern band of Asia from China to Turkey to the northern tier of Africa, areas that have not previously been the subject of much attention. In the past, these countries have tended to gain the attention of scholars and the media only in times of man-made or natural crises. But in fact, these nations share many challenges with others. They wrestle with shortages of food and water and the growth of population and pollution. Many countries, having

been under the shackles of dictatorship for decades, are now redoubling their efforts to educate their citizens, who have become freer to express ideas in journals such as this.

4. Academic scholarship emanating from the region under the journal's coverage tend to get lost in the academic jungle where the pressure of "publish or perish" leaves behind the younger and less experienced members. This journal will provide a venue for the scholars with first-hand knowledge of these areas. By publishing in *CCJ*, they could make important contributions to the body of management and development scholarship on which the journal will continue to concentrate. The *CCJ* will provide a platform for established as well as younger scholars who might collaborate with them in their research.

This fourth issue of the *Cyrus Chronic Journal*, contains six articles. Scholarly articles, from established scholars and policymakers, cover the gamut from the Middle East to Latin America. As part of our mission to advance knowledge about we will continue to include reviews of major scholarly books relevant to the Journal readers.

On the journal's operational side, we want to make the publication more accessible to a wide audience across the world, and so, consistent with the 21st -century trend toward electronic media, we will continue to publish this journal online. To maintain rigor and originality, articles submitted to the journal will nevertheless undergo the standard blind review process. Reviewers' anonymous comments are shared with authors, as appropriate. Submission guidelines and procedures are delineated on the journal's website: <a href="http://www.cyrusik.org/research/the-cyrus-chronicle">http://www.cyrusik.org/research/the-cyrus-chronicle</a>

As the first editor of the journal, I am pleased and proud to accept this challenge. I bring some experience; my first editorial assignment was as an undergraduate student at the then Pahlavi University in Shiraz, Iran, a top-ranking institution in the region. A few students and I founded and published *Danesh-Pajouh* (knowledge seeker). In those days when freedom of expression was severely limited, we managed to publish one issue in March 1965 before the censors put a stop to the enterprise.

Years later, while directing a doctoral program in international business in Texas in the early 2000's, I also served as the co-editor - and eventually editor - of the *International Trade Journal* (ITJ) until my retirement in 2013. Under my leadership, the *ITJ* acceptance rate fell below 10%.

Publishing an academic journal is simply a labor of love. The rewards are many-fold and include working alongside a dedicated team of colleagues – Nader Asgary, Alf Walle, Nancy Black Sagafi-nejad, Dina Frutos-Bencze, reviewers, and the entire editorial Board. In addition, of course, we thank our contributors who have trusted their work of scholarship to be published in a new but growing and promising publication. They have spent many hours working to polish and prepare for the journal for publication.

In this fourth issue, we have already reached a threshold of about 20% in acceptance. Still, *CCJ* needs your support and so I ask for your help in the following ways:

- We are interested to offer special issues based on themes and country case studies. Your support, suggestions, and contributions are welcomed;
- Contribute articles, case studies, and book reviews and commentaries;
- Encourage your colleagues to do the same;
- Encourage promising young scholars especially those from developing and emerging economies from China to the northern tip of Africa to submit their works to our journal;
- Spread the word, especially in countries where CCJ can be most effective;

- Cite the articles published in this journal in your own research when applicable;
- Attend the annual conferences of the Institute (<a href="http://www.Cyrusik.org">http://www.Cyrusik.org</a> the physical platforms that serves as an annual spawning ground for articles that may ultimately be published in this journal;
- Give us your feedback by telling us how we can further promote and improve the journal.

Welcome to CCJ, and thank you.

Tagi Sagafi-nejad, Editor

#### **Abstract**

The organizations seek to improve results and increase the competitiveness with the implementation of management models that support the improvements of the processes and the attendance to the needs of the stakeholders. The objective of this research is to contribute to the practical adoption of a management model in organizations by analyzing the impact of the performance in stakeholders related to social and environmental management. It was used a qualitative research approach that describes, through a case study, intervention and the real-life context of the impact of the implementation of the management model on organizational performance especially in relation to the stakeholder society and community. A questionnaire was sent to strategic collaborators and stakeholders and secondary data were collected. With the analysis of the research data, the conclusion is that the implementation of the management model contributed to the achievement of results and the attendance to the needs of the stakeholders. The implementation of the management model occurred in parallel with other management methodologies that also contributed to the improvement of organizational performance.

**Keywords**: Organizational performance; management model; stakeholders; social and environmental management.

#### 1. Introduction

Management models of 20-30 years ago are not suited to today's' conditions". There is a paradigmatic break in business management that considers the theory of co-evolution and evolution of biology per se that will be fundamental foundations in the life of any business, in the life of any organization and in the life of any project one wants to lead. Biological thinking borrowed here means that companies generally seek through benchmarking and governance to apply sustainable business models so that they either share or perish. This spectrum, which was only a matter of concern to private companies, has become fundamental in governmental enterprises.

Currently, public and private organizations invest in consulting, systems and people development to ensure that management models provide improved organizational performance. It seeks to increase competitiveness and ensure the sustainability and possible growth of the organization in comparison with others of the same scope, size and follow-up by means of the implementation of management models that seek the achievement of the strategic objectives. These support the improvements of the process management and the overcoming of results to meet the needs of the stakeholders. These are individuals and groups (organizations, individuals, legal entities, investors, associations, society, among others) that can influence or be influenced by the strategic results achieved and those who have claims on organizational performance. The concept of applied management model addresses the strategic dimensions of the organization with the objective of meeting the needs of the stakeholders in the long term.

The qualitative methodology came across multiple case studies. It was to analyze how the management model can meet the expectations of stakeholders. The organization was selected due to tradition and recognition in the area of management and the continuity of socio-environmental practices, implemented more than 10 years ago. The research techniques adopted were: application of the questionnaire, interview, and analysis of secondary data. In this case, the searched organization will be identified as Company A.

The research problem was to answer the question: does the implementation of the management model produce significant effects on the performance of social and environmental management vis-à-vis stakeholders? The importance is the frequent attention of the organizations for the survival in the market and the search for effective social-environmental results for the stakeholders, in this case for the Society/Community. The intention is to contribute to guide the implementation of socio-environmental management in organizations and to base studies demonstrating that it is possible to implement

management models in public and private companies with a view to improving socio-environmental results. The general objective of the research was to verify if the implantation of management models in public organizations produces significant effects on the performance of socioenvironmental management before the stakeholders. The specific objectives were:

- analyze how the performance of organizations can be improved with the implementation of the management model.
- raise the benefits of implementing the management model related to the performance of social and environmental management in public companies.
- verify the socio-environmental indicators and practices adopted vis-à-vis stakeholders.

#### 2. Literature Review

The theoretical basis presents a panorama of the performance of the stakeholders and their relationship with the organization.

#### 2.1 Organizational performance towards stakeholders

Organizational performance is considered an important concept in Strategic Management literature. Some authors have studied the strategy with the aim of presenting concepts and discussions about performance as Hansen and Wernerfelt (1989), McGahan and Porter (1997), Powell (1996), Rumelt (1991), Schmalensee (1985) and Wernerfelt and Montgomery (1988). In the 1980s, the idea emerged that good performance is associated with overcoming goals and meeting the interests of the different groups that relate to the organization (Cameron, 1980; Kanter & Brinkerhoff, 1981; Freeman, 1984).

The definition of performance associated with multiple stakeholder theory or stakeholder theory was introduced by Edward Freeman. In 1963, the term stakeholder appears in the management literature in an internal memo of the Stanford Research Institute. The term sought to spread the concept of stakeholder as the group to which managers must offer answers. Researchers also demonstrated that executives should understand the needs and interests of this group, since they could not formulate corporate goals without being able to assure the company's survival through involvement in values, choices, and potential risks and benefits (Freeman, 1984).

Different approaches are presented in stakeholder studies. Importance can be determined by the degree of contribution to organizational performance. According to Altkinson and Waterhouse (1997) and Shankman (1999), the organizations' goal is to meet the needs of shareholders who they consider to be the main stakeholders, and the others are important in that they contribute to increasing the organization's profit. On the other hand, other authors argue that the goal of organizations is to serve not only the interests of shareholders but of all stakeholders (Donaldson & Preston, 1995, Freeman 1984, Metcalfe 1998, Moore 1999).

Considering the concepts of stakeholders, it is presented in Appendix A, the matrix of stakeholders that are considered high priority in the management of the company being surveyed. The theory seeks to define which are the groups that are related to the company, its needs, how is the performance of the stakeholders to reach these objectives and how the management must take into account these desires in the management of the companies. The performance from this perspective proposes that the efficiency of the organizations is related to the answers to the demands and the satisfaction of the diverse stakeholders. In relation to the performance measurement approach, the better the satisfaction of the demands of the stakeholders, the greater the satisfaction and the better the performance of the company. In order to obtain performance measurement, it is necessary to identify the stakeholders and their needs to be met (Connolly, Conlon, & Deutsch, 1980; Hitt, 1988; Zammuto, 1984).

The disruptive nature of many sustainability solutions can be the main barrier to their implementation and dispersion: adopting a business model perspective can help solve this problem. The implementation of sustainable solutions often depends on projects being implemented and managed collectively, so organizations need to adapt their business models to deliver value propositions collectively, a phenomenon that research on business models for sustainability must address (Gauthier, C Gilomen, B., 2016)

#### 3. Theoretical Model

#### 3.1 Management Models

The concepts of management models are presented as a way of beaconing to improve the results and competitiveness of organizations. Management should advocate for ways of acting that ensure the achievement of strategic results vis-à-vis stakeholders (Correia, 2016). According to Wilkinson and Dale (1999), it is necessary to meet the needs of customer relationships, compliance with legal requirements, regulations and historical trajectory, among other aspects, leading to the adoption of references that legitimize, even partially, the capacity management of organizations in the business environment. Shehabuddeen et al. (1999) state that in an attempt to guide decisions, managers and researchers in the management area use models, with the purpose of facilitating the understanding of the business and internal communication of the organization within a system for a defined purpose.

Pidd (1999) emphasizes that a model can be understood as an explicit and external representation of part of reality seen by people who wish to use the model in order to understand, change, manage and control that part of reality in some way.

According to Shehabuddeen et al. (1999), models are representations of real objects or situations and can be presented in various ways. Models can be categorized into three types: (1) models that do not have the same physical appearance with the modeled object, but rather an analogy; (2) models that represent physical replicas of real objects; (3) models that represent problems of a system by means of symbols or mathematical representations. The first type corresponds to the models that present an analogy to the theoretical proposition of management for the organizations and, in this article, detailing the management model adopted by Company A. Such organization is a public company that underwent structural changes becoming a company where the Government holds a majority stake.

Studies indicate that utility companies are losing profitability and threats and opportunities for solar photovoltaic power generation for utilities have been identified based on a series of interviews with Brazilian utility managers. In this sense, utilities could not benefit from solar photovoltaic as just another source of electricity in competition with traditional sources (as they are today), but as a strategic gateway to the emerging generation and distributed services market. It could act as a basis for future business model innovations in new, growing markets such as energy efficiency and distributed storage. Similarities are pointed out about the importance of creating broader environments for social innovations and business models, such as skill development, knowledge, and social capital, through multi-level interventions focused on different aspects of generation, supply and use of (Richter, 2013).

There are tendencies in the organizational environment in the changes of aspects of the productive dynamics in response to the pressures and adoption of environmental management policies and in strategies to increase competitiveness. For the organizations, the concern with the environmental issue provoked changes of different natures and had the challenge of adapting to sustainability in terms of business competitiveness.

The traditional model of energy business management is under pressure and services must play an important role in the energy transition. Experts and scholars argue that utilities need to innovate their business models and turn from commodity suppliers to service providers. The transition from a product-oriented, asset-oriented, capital-driven business model towards a service-oriented, expenditure-intensive business model based on intangible assets can present major organizational challenges (Helms, 2016).

#### 4. Empirical Section

The research was predominantly descriptive, but with elements of exploratory and explanatory research. The qualitative research was adopted through a case study of the Companies through a qualitative study of Company A to describe an intervention and the real-life context of the implementation of the management model produces effects on organizational results, especially with regard to related stakeholder's socio-environmental management. The case study is an empirical investigation that delves into a contemporary phenomenon within its real-life context. Its purpose is to establish a framework for discussion and debate (Yin, 2015). This study was divided into two steps to reach the objectives and facilitate the approach and the deepening in the researched subject.

The first stage was composed of sending questionnaires to detail the organizational characteristics and data on the implementation of the management model obtained. Questionnaires were sent by e-mail to professionals who worked on the implementation of the management model and continue in the area. The data during the phase of implementation questioned: what the benefits to the organization were, the perception of improvement in the management and in the performance of the socio-environmental management of the organization to the stakeholders.

In the second stage, an organization was selected where unstructured interviews were conducted at the headquarters of the research organization and had an average duration of one hour. The central themes were related to the implementation of the management model and the impact generated. The interviews began with a brief comment about the research and the request for recording, in order to facilitate the analysis and contribute to the participation of the interviewer in the subject addressed. The methodological approach analyzed secondary data, using content analysis to extract evidence from sources such as corporate web sites, annual reports, documentary analysis of databases, and government and sustainability sourced. The objective of the second stage was to deepen the answers to the questionnaire, to detail and categorize stakeholders, to seek information about them through unstructured interviews, to describe management practices related to them, and to develop strategic indicators. Secondary data were collected according to the type of stakeholder: society, government, suppliers (council minutes, regulatory agency publications, internet publications, and social networks); shareholders and clients (publications of reports on the internet and social networks) and employees (unstructured interviews).

The choice of Company A was due to tradition, experience, recognition, and continuity in the adoption of socio-environmental practices, implemented more than 10 years ago, for accessibility and availability in contributing to the research. Some of the awards and recognitions achieved by Company A in 2017 were: Transparency Trophy, CDP Water, Dow Jones Sustainability Index, Top 100 Green Utilities, Bovespa Corporate Sustainability Index and Efficient Carbon Index of BM & F Bovespa and BNDES.

Company A is a corporation founded in 1952 and is a public service concessionaire of the electric sector with state shareholding control. Currently, it has approximately 6,000 employees and was selected for the 19th consecutive time to compose the portfolio of the Dow Jones Sustainability Index in the period 2018/2019, remaining the only company in the Latin American electric sector to be part of the index.

The management model adopted by Company A is a systemic model adopted by numerous organizations and was built on a foundation of essential fundamentals to achieve performance excellence. It presents a strategic and systemic approach to organizational management, seeking the satisfaction of stakeholders' needs and encouraging sustainability in long-term results. This approach is explained mainly by the

Fundamentals of Excellence: systemic thinking, innovation, agility, transformative leadership, customer and market knowledge, social responsibility, valuing people and culture, process orientation and value creation (Correia, 2016; FNQ, 2014).

One of the interviewees of Company A stated that the perception of the impact of the implementation of management models is different according to the stakeholder:

Some stakeholders are more impacted and some less. For people there was the incentive in the search for knowledge, shareholders and leadership was the direction for a unique purpose linked to excellence, for the customers improved the relationship processes, community and suppliers there was the effective implementation of practices to improve the relationship. (Interviewee of Company A)

In this article, we sought to focus on the stakeholders of society/community. According to secondary research data, several management practices are used to interact as detailed in Appendix B.

Company A uses in its management model the adoption of practices according to the type of stakeholder and draws up the aspects that are relevant to its action with the Community such as: access to energy, water, biodiversity, emissions and climate change, management of people, risk management, investment for growth and concessions, social investment, energy quality and customer relations.

Company A develops management practices to interact with stakeholders, society and government, consequently seeks to monitor the indicators related to its performance. We will not detail the indicators considered for Government since they are related to Markets and Shareholders and do not reflect a relationship with the management practices adopted.

In Appendix C, the indicators adopted by Company A. are illustrated. The report with information on 2018 is not yet available. In the analysis of the research data, were deployed contents related to the benefits to the organization, employee involvement, organizational changes, management role, general comments about the implementation and suggestions for improvement for organizational management.

The performance improvement theme was directed to the impact of model implementation and recognition on organizational performance that is related to the improvement of the results of the strategic indicators. Already, were detailed in relation to the impact of the results on stakeholders, the topics of improvement in performance, perception of improvement and satisfaction of stakeholders.

In general, the benefits cited were: organization and integration of processes, improvement of results, focus on stakeholders, improvement of strategic planning, quality search, improvement in sustainability, organizational learning, systemic vision, team development, improvement in service customer relationship management, employee involvement, cost reduction, optimization of resources, organization of information in the management report, strengthening of the brand, public recognition, innovation, adoption of effective management practices and improvement of comparative benchmarks.

#### 5. Conclusions

The Case Study of Company A demonstrates that it is necessary to manage the performance of stakeholders through management practices. The implementation of the management model occurred in parallel with other management methodologies such as ISO 9001, ISO 14.001 and the Balanced Scorecard (BSC), which also contributed to the improvement of organizational performance. The challenge in Public Management is the definition and monitoring through indicators of actions implemented. It is suggested that the indicators are not only related to the investments made but related to the impacts on society. It is no use

several indicators if they do not demonstrate the impact of management practices and public policies towards stakeholders by measuring the fulfillment of expectations and needs.

After the State Reform in Brazil, public management sought to be more active and efficient considering a new premise: civil society participation as an evaluator of governmental actions and companies linked to the action of the Public Power (Gespública, 2018). This paradigm shift in the governance model for governance more open to stakeholder participation in the third sector and private sectors has required that the current models be restructured in order to expand and monitor the positive outcomes of these contributions. However, as already seen, even in well-organized locations regarding the monitoring of its activities, such as Company A, it is also necessary to develop indicators that will allow gauging and optimizing, even more, the management model aimed at democratic and transparent governance.

In public management, stakeholders are individuals and groups that can influence or be influenced by the strategic results achieved by activities related to the State, whether strictly governmental or when it operates in the private sector. It was considered that efficiency and competitiveness have been linked for years to the most closed and results-oriented management models, but that the reform of the governance paradigm has led and required significant changes that affect the relation of the State and its partners, as well as companies acting in strategic areas of public interest in relation to their stakeholders. It is concluded that the indicators currently used to measure efficiency are no longer enough to determine the quality of socio-environmental management since they need to be better adapted to the current scenario of collaboration between stakeholders and public managers. Therefore, in order for the measures adopted to produce qualitatively better results, management models should seek to be more resilient and open to the information that these subjects can add to the decision making process and transparency.

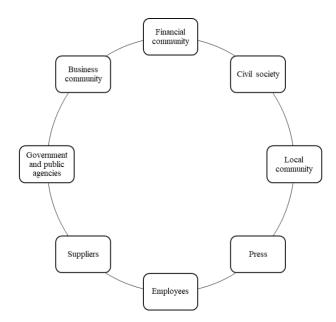
#### References

- 1. Altkinson, A.A., & Waterhouse, J. (1997). "A stakeholders approach to strategic performance measurement". *Sloan Management Review*, Spring, 38(3), 25-36.
- 2. Cameron, K. (1980). "Critical questions in assessing organizational effectiveness". *Organizational Dynamics*, Lincoln, 9, 66-80.
- 3. Connolly, T., & Conlon, E. J.; Deutsch, S. J. (1980). "Organizational effectiveness". *Academy of Management Review*. Nova Iorque, 5(2), 211-217.
- 4. Correia, C. M. S. (2016). The Impact of the implementation of the Management Excellence Model® (MEG) in the organizational performance of companies recognized in the Quality Award of Minas Gerais, 149. Thesis (Doctorate in Administration) FACE/UFMG, Belo Horizonte.
- 5. Donaldson, T., & Preston, L.E. (1995). "The stakeholder theory of the corporation: concepts, evidence, and implications". *Academy of Management Review*, 20(8), 65-91.
- 6. FNQ. (2008). Cadernos Rumo à Excelência: Resultados. São Paulo: FNQ.
- 7. FNQ. (2014). *Critérios Rumo à Excelência*: Avaliação e diagnóstico da gestão organizacional. São Paulo: FNO.
- 8. Freeman, R. E. (1984). *Strategic management*: a stakeholder approach. Boston: Pitman.
- 9. Gespública. (2018). *Benchmarking colaborativo* Guia Metodológico do Ministério do Planejamento. Recuperado em 13 abril, 2018, de http://www.gespublica.gov.br/content/benchmarking-colaborativo
- 10. Gauthier, C., Gilomen, B. (2016). "Business Models for Sustainability: Energy Efficiency in Urban Districts", Organization and Environment, 29(1), 124-144.
- 11. Hansen, G. S., & Wernerfelt, B. (1989). "Determinants of firm performance: the relative importance of economic and organizational factors", *Strategic Management Journal*, 10(5), 399-411.
- 12. Helms T. (2016). "Asset transformation and the challenges to service a utility business model", Energy Policy, 91, 98-112.
- 13. Hitt, M. A. (1988). "The measuring of organizational effectiveness: multiple domains and constituencies". *Management International Review*, Kiel, 28(2), 28-40.

- 14. Kanter, R. M., & Brinkerhoff, D. (1981). "Organizational performance: recent development in measurement". *Annual Review of Sociology*, Palo Alto, 7, 321-349.
- 15. Mcgahan, A. M., & Porter, M. E. (1997). "How much does industry matter, really?" *Strategic Management Journal*, 18 (Special Summer Issue), 15-30.
- 16. Metcalfe, C. E. (1998). The stakeholder Corporation. Business Ethics, 7(1), 30-36.
- 17. Moore, G. (1999). "Tinged shareholders theory: or what's so special about stakeholders?" *Business Ethics:* a European Review, 8(2), 117-127.
- 18. Pidd, M. (1999). Just modeling through a rough guide to modeling. Lancaster: Lancaster University.
- 19. Powell, T. C. (1996). "How much does industry matter, an alternative empirical test". *Strategic Management Journal*, 17(4), 323-334.
- 20. Richter, M. (2013). German utilities and distributed PV: How to overcome barriers to business model innovation. Renewable Energy. http://doi.org/10.1016/j.renene.2012.12.052
- 21. Hiteva, R., & Sovacool, B. (2017). Harnessing social innovation for energy justice: A business model perspective. Energy Policy. <a href="http://doi.org/10.1016/j.enpol.2017.03.056">http://doi.org/10.1016/j.enpol.2017.03.056</a>
- 22. Rumelt, R. P. (1991). "How much does industry matter?" Strategic Management Journal, 12(3), 167-185.
- 23. Schmalensee, R. (1985). "Do markets differ much?" American Economic Review, 75(3), 341-350.
- 24. Shankman, N. (1999). "A Reframing the debate between agency and stakeholders theories of the firm". *Journal of Business Ethics*, 21(4), 319-334.
- 25. Shehabuddeen, N., Probert, D., Phaal, & R., Platts, K. (1999). "Representing and approaching complex management issues: Part 1 Role and definition". *Centre for Technology Management Working Paper Series*, Cambridge: University of Cambridge Institute for Manufacturing.
- 26. Wernerfelt B., & Montgomery C. A. (1988). "Sources of superior performance: market share versus industry effects in the U.S. brewing industry". *Management Science*, 37(8), 623-632.
- 27. Wilkinson, G., & Dale, B. (1999). "Integration of quality, environment and health and safety management systems: an examination of key issues". Proceedings of the Institution of Mechanical Engineers, Part B. *Journal of Engineering Manufacture*, v. 213, n. 3, 275-283.
- 28. Yin, R. K. (2015). Estudo de caso: planejamento e métodos. Porto Alegre: Bookman.
- 29. Zammuto, R. F. (1984). "A comparison of multiple constituency models of organizational effectiveness". Academy of Management Review, Nova Iorque, 9(4), 606-616.

#### **Appendix**

#### **Company Stakeholders Matrix**



## Relationship Channels and Commitments with Stakeholders

Group	Management Practices / Relationship Channels
	- Committees
CIVIL SOCIETY	- Annual Reports
CIVIL SOCIETY	- Portal
	- Policies (Environmental Policy, Biodiversity, Sponsorship, Grant, etc.)
	- Sustainability Channel
	- Face to Face (Proximity Program, Forums and Socio-environmental Negotiations)
LOCAL COMMUNITIES	- Portal
	- Policies (eg Community Communication Policy).
	- External Campaign to Prevent Accidents with Population
GOVERNMENT AND PUBLIC	- Surveys (eg, Research with City Halls)
BODIES	- Face to Face (Agents of Relations with the Public Power, meetings and services)

## **Company Strategic Indicators**

Stakeholde rs	Indicators	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Net Operating Revenue (R\$ million)	8.467	10.24 6	10.89	12.15 8	12.86	15.74 9	14.137	14.62 7	19.540	21.29	18.77	21.712
	Ebitda (R\$ million)	3.222	4.062	4.099	4.588	4.543	5.351	5.084	5.983	6.382	4.955	2.638	3.492
Shareholder s /	Net Income (R\$ million)	1.719	1.743	1.887	2.134	2.258	2.415	4.272	3.104	3.137	2.492	334	1.001
Governmen t	Note on the DJSI (Dow Jones Sustainabilit y Index) (points)			82	84	82	78						
	Market value (R\$ million)	17.01 7	15.80	15.76 1	19.59 5	18.22	22.69 4	19.292	17.62 9	16.812	7.843	9.773	8.455

	Value of the brand (R\$ million)		890	1.340	1.297	1.503	1.277	1.429	1.439	1.662			
	Accident frequency rate (own employees)	0,37	0,48	0,43	0,51	0,41	0,25	0,23	1,7	1,7	2,04	1,7	2,0
	Accident frequency rate (workforce)	1,3	0,92	0,72	0,79	0,54	0,63	0,44	0,42	0,4			
Employees	Average hours of training per employee	59,3	50,7	71,25	72,43	75,66	43,18	35,5	69,6	49,37	37,26	20,56	35,52
	Organization al Climate Favorability Index		60		53		50						
	Note in the Indicators of Labor Practices (DJSI)				89	86	89						
	Performance Index				50,4	66,7	68,82						
Providers	Supplier Performance Index				79	79	80						
	Customer Service				70	70	72,7						
	Aneel Customer Satisfaction Index (IASC) (%)	68,03	71,63	69,68	68,14	70,25		64,51	61,98	68,75	66,71	64,04	65,75
Customers	Equivalent interruption duration per consumer (DEC)	13,03	13,14	13,66	14,09	12,99	14,32	14,73	12,49	10,77	11,5	11,7	10,8
	Equivalent frequency of interruption per consumer unit (FEC)	6,43	6,39	6,53	6,76	6,55	7	7,03	6,26	5,58	5,87	5,64	5,44

	Perceived Quality Satisfaction Index (ISQP) (%) (Abradee)	80,6	85,7	83,3	81,43	80,52	80,55	78,86	77,6	81,3	81,03	70,1	79,2
	Resources invested in the environment (R\$ million)	20	36,8	42,2	60,7	54,3	53,4	59,4	52,4	52,8	53,8	52,1	37,5
	Investments in R & D environment (R\$ million)					0,8	2,5	6,6	10	11,7	8,5	2,9	1,1
	Total resources invested in social responsibilit y (R\$ thousan d)					77.44 0	75.07 4	115.02	83.23	109.62	75.75 1	57.64 0	128.22
Society	Note on the Environment al Dimension in the Dow Jones Sustainabilit y Index (DJSI)			84	87	87	75						
	Note on Social Dimension (DJSI)				83	83	86						
	Degree of Overall Satisfaction of opinion formers				72	77	71						