

TEACHING CASES

TRINTA E OITO ANOS EM UM DIA: SAMARCO, É POSSÍVEL RECUPERAR SUA LEGITIMIDADE?

THIRTY-EIGHT YEARS IN ONE DAY: SAMARCO, IS IT POSSIBLE TO REGAIN IT'S LEGITIMACY?

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MARIA AUDENÔRA RUFINO *maryaudenora@hotmail.com*

POLYANDRA ZAMPIERE PESSOA DA SILVA

WENNER GLAUCIO LOPES LUCENA

FEDERAL UNIVERSITY OF PARAÍBA

ABSTRACT

This Teaching Case aims to help the understanding of undergraduate and postgraduate students in Administration, Accounting and other business areas on the survival of organizations in a dynamic environment. The proposal was designed from the scenario of the breaching of Samarco's dams, aiming to report the company's legitimacy before, during and after the event, relating it with the Theory of Legitimacy. Other theories can be used together in scenario analysis. The Teaching Case was built from news published in the media, scientific articles, annual reports and sustainability of the company, as well as on Samarco's website, from April to October 2018. The results of the application are expected. Case Studies allow students to understand the importance of legitimacy for maintaining the activities of organizations; the understanding of the different types of legitimacy techniques; and the appropriate time to apply each one. Furthermore, the study enables students to insert themselves in a context in which theoretical knowledge can be used to understand practical events; and, therefore, develop a critical analysis from the assumptions of the Theory of Legitimacy.

Keywords: Samarco; Theory of Legitimacy; Environmental and Social Damage.

RESUMO

Esse Caso de Ensino objetiva auxiliar a compreensão de estudantes dos cursos de graduação e pós-graduação em Administração, Ciências Contábeis e outras áreas voltadas à linha de negócio sobre a sobrevivência das organizações em um ambiente dinâmico. A proposta foi desenhada a partir do cenário do rompimento das barragens da Samarco, visando relatar a legitimidade da empresa antes, durante e após a ocorrência do evento, relacionando-a com a Teoria da Legitimidade. O Caso de Ensino foi construído a partir de notícias divulgadas em meios de comunicação, artigos científicos, relatórios anuais e de sustentabilidade da empresa, assim como no site da Samarco, no período de abril de 2018 a maio de 2019. Espera-se que os resultados da aplicação do Caso de Ensino possibilitem aos discentes a compreensão da importância da legitimidade para manutenção das atividades das organizações; o entendimento dos diferentes tipos de técnicas de legitimidade; e o momento apropriado para a aplicação de cada uma delas. Ademais, o estudo possibilita aos discentes se inserirem em um contexto no qual os conhecimentos teóricos podem ser usados para compreender os eventos práticos; e, portanto, desenvolver uma análise crítica a partir dos pressupostos da Teoria da Legitimidade.

Palavras-chave: Samarco; Teoria da Legitimidade; Danos Ambientais e Sociais.

UNDERSTANDING THE SAMARCO CASE: LEGITIMITY OF THE MINING SECTOR

Samarco and the Mining Sector

Brazil is a country of continental proportions, with large and diverse mineral resources. The exploitation of these resources is of great importance for the economic development of the country, but it must be done respecting the essential precepts that mitigate the social and environmental impacts. The extraction of mineral resources can create potential risks to the local community and the environment, based on the legally constituted model of exploitation. The realization of the risk, as occurred with the Fundão and Santarém dams under the responsibility of the Samarco company, puts into discussion the adopted ore exploration model and the companies' ability to predict and control a probable tragedy. From this, the Theory of Legitimacy may have to contribute to the attainment, maintenance and / or recovery of the legitimacy of the sector and, more specifically, of the companies involved in tragedies that include social and environmental damages.

Samarco Mineração S.A is a privately held company founded in 1977 that operates in the mining segment, currently controlled through a joint venture between Vale S.A and Anglo-Australian BHP Billiton. Samarco's activities were then primarily located in the states of Minas Gerais and Espírito Santo, and its main product is iron ore pellets sold to the steel industry in 19 countries: the Americas, the Middle East, Asia and Europe. Corporate governance is based on four central pillars: Corporate Responsibility, Transparency, Equity and Accountability. Management consists of a Board of Directors with four effective members and four alternates, appointed by the shareholders of the parent companies. The Board of Directors is divided into four committees: Finance and Strategy; Operations; Audit; and Remuneration. These committees define strategies, approve business plans, investments, budgets, and monitor company results.

Samarco's mission and values are based on three criteria: (i) produce and supply iron ore pellets, applying technology intensively to optimize the

use of natural resources and generate economic and social development, with respect to the environment; (ii) respecting people, caring for life above all results and material goods, as well as the right to individuality, without discrimination of any nature aimed at the well-being of individuals and society; and (iii) be careful with the environment, through the correct use of resources necessary for the company's activities. Specifically, to meet the third criterion, the company performed periodic monitoring and sought to mitigate environmental impacts related to risks related to operations and business strategy. Thus, annually, review processes were conducted to identify material risks, that is, the most critical within risk classification categories, and assess them according to their severity and probability, involving the areas and leaders in the analysis.

Despite being considered of high environmental and social impact, Samarco's sector is essential for Brazil's economic development, since this activity has a significant representation in the amount of the country's gross domestic product (GDP), approximately 4% in recent years from 2014, and also in the generation of jobs and taxes for the government. In recent periods, especially since 2004, ore production has grown substantially, reflecting the favorable economic environment of the mining sector in Brazil and around the world. However, 2014 was marked by an increasingly complex and competitive external scenario for the mining sector. The combination of slowing growth in developing economies, lower iron ore prices and rising global production led to a new market environment in which aspects such as cost, productivity and profitability defined the activity's performance.

Hus, the new economic scenario had the ability to affect the company's operating strategies. However, Samarco managed to overcome the effects of the unfavorable economic scenario for the sector, reaching a record volume of 373.962 million tons of iron ore exports in 2016, representing a 1.7% increase compared to 2015. (MINISTÉRIO DE MINAS E ENERGIA, 2017). The average price per ton of ore exported by Brazil in December 2014 was US\$ 50.40, up 56% compared to December 2015 (US\$ 32.30) and 28.6% compared to November 2016 (US\$ 39.2) (MINISTÉRIO DA INDÚS-

TRIA, COMÉRCIO EXTERIOR E SERVIÇOS - MDIC, 2017). The sector plays an important role in the social context, as it is responsible for a considerable share of jobs and direct and indirect job creation. According to the National Department of Mineral Production, the sector had 663,829 employees in 2016; 702,853 employees in 2015; 781,844 employees in 2014; and 785,174 employees in 2013.

In mid-2014, Samarco released a plan addressing its strategy for the next eight years. Among its priorities were high productivity, with maximum use of available assets in all areas and activities; low production costs in order to ensure competitiveness; high quality standards in line with market requirements; and a strong reputation that reflects good relationships with customers, employees, business partners and society at large. In view of the above, it is observed that Samarco demonstrated a preventive behavior, aiming to avoid damage to the environment and society. So, what happened to the Fundão and Santarém dams in 2015?

Samarco: periods before the accident the Fundão and Santarém dams

Samarco has always been considered an example of success; 2015 was marked by the economic slowdown and the fall in commodity prices, but Samarco remained at the top of basically all rankings that evaluated profits, margin and net revenue of companies in the country. The company received several awards and recognitions: in 2014, it was elected for the second consecutive year the Best Mining Company and the second Largest Mining Company in Brazil (Revista Exame); was two-time champion in the Mining and Steel Sector (Anuário Época Negócios 360°); ranked for the fourth time among the 150 best companies to work for in Brazil (Guia Você S / A); received the Inca Excellence Awards Digital (Ideas, 2014); was 12th in the Benchmarking Ranking (Edição do Programa Benchmarking Brasil, 2013); received the Green Mine Award; was the 14th in the Espírito Santo Business Leader Award; received the Findes / Senai Environment Award; and was considered the companies that best communicate with journalists. In 2015, the company occupied the position of 12th largest exporter in the country (MDIC, 2016).

In addition, the economic activity developed by the company plays an important role in the Brazilian economy, and its revenue has a direct impact on the GDP of Minas Gerais and Espírito Santo. In some locations, taxes generated directly by Samarco's activities are vital to the local economy of the municipalities. Specifically, Samarco's revenue is equivalent to 1.5% of Minas Gerais GDP and 6.4% of Espírito Santo GDP; The taxes generated directly by Samarco's activities corresponded to: 54% of Mariana (MG) revenue, 35% of Ouro Preto (MG) revenue and 50% of Anchieta (ES) revenue. Samarco also paid 32 million in taxes to municipalities of direct influence in Espírito Santo in 2014; and another R\$ 50 million went to the municipalities of direct influence in Minas Gerais in the same year.

According to data disclosed in Samarco's Annual Report 2014 (last report before the Mariana dams broke), the wealth generated by Samarco totaled R\$ 9,242.2 million, a 10% decrease compared to 2013 (R\$ 10,266.6 millions). The net added value produced, in turn, reached R\$ 3,999 million in 2014, 3.2% above the value added in 2013 (R\$ 3,678.7 million). The total value added to distribute was R\$ 4,677.8 million, an increase of 4.6% (R\$ 4,214.9 million in 2013). As for the distribution of resources, it can be seen from Table 1 that approximately 66% and 60% of the wealth generated was distributed to remunerate equity in 2013 and 2014, respectively.

Table 1 Samarco Resource Allocation in 2013 and 2014

Accounts	2013	%	2014	%
Remuneration of 2,969 employees	419,00	9,72%	469,50	10,24%
Taxes, fees and contributions	279,50	6,49%	597,70	13,04%
Third party capital remuneration	804,90	18,68%	785,00	17,13%
Equity remuneration	2.805,50	65,11%	2.731,40	59,59%

Note: ¹values in millions

Source: <https://www.samarco.com/investidores>

It is worth considering that the economic aspects that contribute to the generation of economic wealth, taxes and job vacancies need to be aligned with the social and environmental aspects, that is, they need the triple bottom line. Despite the importance of the mining sector to the economy of the country, the sector is considered to have high environmental and social impact, termed with a known risk sector. Geographic changes caused by exploitation of economic activity can directly affect social welfare as well as the ecological environment. However, such impacts may be mitigated but not nullified provided the company develops preventive measures for damage. However, the risks exist and what legitimates living with the risks are the favorable aspects of mining activity. Therefore, it is the balance between them that ensures the legitimacy of Samarco's economic activity, that is, the contract between economic activity and society.

Thus, to reduce social and environmental risks, Samarco invested resources focused on the environmental and social area. In environmental management, investments in 2014 focused on efficiency gains in the use of natural and mineral resources, legal compliance and impact control on issues such as waste, tailings, water and greenhouse gas emissions and particulate matter. In total, R\$ 88.3 million were invested during the year. The social transformation strategy directs investments and relationship practices along three axes: (i) education and income generation; (ii) strengthening of institutional capital; (iii) and citizenship and social participation, a total of R\$ 24.1 million was invested, as indicated in the 2014 Annual Report.

In addition, during 2014, the company claims to have run six simulated sets to assess the company's crisis response capabilities and event management procedures that could lead to discontinuation of operations. For 2015, the companies already planned to deepen the control evaluations and include new themes, as well as consolidate the crisis prevention and management system. However, the efforts described by the company were not sufficient to identify the risks and correct them before their realization. In addition, responsiveness seemed ineffective in reducing human, material and environmental losses.

Samarco: During and After the Mariana Tragedy

Everything went as normal in the peaceful districts near the Fundão and Santarém dams in Marina (MG): every day Samarco employees extracted tons of ore, processed and accumulated ore tailings in dams built for this purpose; and thus ended the day of the inhabitants of that region. To the surprise of the population, however, the tranquility of the region was interrupted by an avalanche of millions of cubic meters of ore tail sludge. On November 5, 2015, at around 18 pm, one of the largest social and environmental tragedies in the mining sector occurred, the breaking of two iron ore tailings dams by mining company Samarco: the Fundão and Santarém dams, which represented a river with approximately 50 million cubic meters of mud.

According to a preliminary report by the Instituto de Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), the breach of the dams was classified as a Level IV Disaster, which is the major disaster classification. This level of disaster is characterized when the damage caused is very important and the damage is very large and considerable. The rupture released approximately 50 million cubic meters of mining tailings in the Doce River valley, covering about 600 kilometers along 39 municipalities to reach the Atlantic Ocean. The consequences of the sewage sludge runoff buried the city of Bento Rodrigues, devastated seven other districts of the city of Mariana - MG and contaminated the River Gualaxo do Norte, River do Carmo and River Doce. The cities near these rivers, from Mariana - MG to the mouth of the River Doce in Espírito Santo, had their routines affected by the interruption of water supply for days.

In addition to the various material losses, the human losses were 19 people. Damages caused include: worker deaths; population displacement; destruction of public and private structures; interruption of water supply; interruption of fishing indefinitely; interruption of tourism; mortality of terrestrial biodiversity and fauna; siltation of watercourse; changes in freshwater, saltwater and brackish quality standards, sense of danger and helplessness of the population among other physical and psychological factors (IBAMA, 2015). To mitigate the damage caused, the company created the

Renova Foundation, constituted to repair the damage caused by the dam rupture. The Renova Foundation has already paid R\$ 1.1 billion to 7,558 families in municipalities affected by mud in 2015, in the form of compensation and financial aid.

The consequences on Samarco's financial and financial situation result in fines for infringement notices, falling financial indicators, interruption of operating activities and legal proceedings. In all, IBAMA issued 24 environmental infraction notices to the mining company, which was also fined by the Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) and by environmental agencies of the governments of Minas Gerais and Espírito Santo, totaling R\$ 345 million. In a report linked to the newspaper *Estadão*, Vale's president, Fabio Schvartsman, goes a little further, and stated that Samarco consumed R\$ 5.3 billion in compensation and that this amount does not represent half of what should be spent to compensate people harmed by the "accident" caused by the mining company.

After the interruption of activities, the damage to the company's assets was considerable. Samarco, which accumulated net income in the periods prior to the event: R\$ 2,713 million in 2013, R\$ 2,806 million in 2014, in 2015 and 2016, accumulated losses of R\$ 5,837. million and R\$ 3,362 million, respectively. The company that had an increasing net equity over the last periods, R\$ 3,758 million (2013) and R\$ 4,313 million (2014), ended 2015 and 2016 with uncovered equity of R\$ 1,653 million and R\$ 6,922 million, respectively. In 2017, Samarco reported that there were about \$ 3.8 billion in debt, of which \$ 1.6 billion with banks and \$ 2.2 billion with bondholders (REVISTA EPOCA, 2018). As for the future expectation, the economic, financial and operational situation of the company is still uncertain.

After four years of the tragedy, its causes are still under investigation and some hypotheses have been raised. Evidence indicates that Samarco knew that the Fundão dam could be unstable. The year before, a team of company technicians identified cracks on top of one of the dam's walls, corrected with simple embankments at its base, which at the time were not considered as a result of static liquefaction (solid material that behaves as a fluid), this happens when there is too much water in the dam foundation.

According to the Public Prosecutor of Minas Gerais, the liquefaction could have been caused by Samarco's successive elevations in the dam's height due to the growing increase in iron ore pellet production at that unit. According to the Radio Câmara report, the Public Prosecution Service also reveals changes made to the original project, such as the 25-meter increase in wall elevation in the 12 months prior to the dam's collapse. It is noteworthy that the president of Samarco, Ricardo Vescovi, at the time, denied having knowledge about the liquefaction in the Mariana dam.

In this context, despite all the commitment reported by Samarco with measures to regularize the situation of those harmed by the breach of the Mariana dam, after three years of this tragedy, the inhabitants of the region are still fighting in court for their rights; The environmental damage is mainly felt by those who depended on River Doce for subsistence maintenance and whose source of income was the employment relationship with Samarco, directly or indirectly. To date, the company has not yet resumed its operational activities in the region. To this end, Samarco will have to rebuild the explicit and implicit social contract with society, committing itself to adjustments and changes in the conduct of operating activities, and showing to society that its activities are necessary in the constituted social environment. The company is expected to resume operations in 2022. For Samarco's resumption, two environmental licenses are required: the Alegria Sul pit and the Corrective Operating Licensing (LOC) of existing structures at the Germano complex in Mariana (EXAME, 2017).

In addition, Samarco has endeavored to convince society that its operational activity is important for the economic and social development of the region. Company announcements have considered the positive side of the company as favorable environments for success and treat its negative side exceptionally. At first, according to Medeiros, Silveira and Oliveira (2018), Samarco sought in its statements: (a) to shift the blame from itself to others, be it nature or others involved; (b) evidence from expert reports that the consequences for the environment are not so severe and the population is being met with compensation and actions to accommodate those who have lost their homes; and (c) mask the crime by showing its efficient,

responsible performance and, above all, by saying that it was an unforeseen accident.

Recently, in order to show the consequences of the disruption of its operational activities to the local and national economy, Samarco has hired an impact study, done by Consultoria Tendência. In this study, some projections of the economic reflexes due to the company's inactivity are presented, such as: increased unemployment; drop in exports in Minas Gerais and Espírito Santo; average loss of R\$ 5.3 billion per year by 2026 in Samarco's revenues (in 2017 this represented 9% of Minas Gerais' tax revenue and 41% of Espírito Santo's tax revenue). In addition, the study points out that Samarco's inactivity will represent, by 2026, an average annual loss of R\$ 1.2 billion in taxes. To date, there is no information on when the mining company will return to its operating activities. In a note on the investor relations website, Samarco informs that the licensing processes required for the return of its activities are underway and that new technologies will be used, which will bring greater safety and lower environmental impact without any period specification. In a text linked to Valor Econômico Magazine, on May 29, 2019, the company said that they intend to return to activities in mid-2020.

Given the above, the economic importance of Samarco to the national GDP and the development of the region of Minas Gerais and Espírito Santo, as well as the social impacts and environmental damage that are irreversible and immeasurable, asks: when will Samarco return? operating, what conditions will be imposed by society for the return of exploration activities. After all, is it still possible to trust the company? What will the company do differently, since it was considered an example of sustainability, and that didn't stop the tragedy ?!

TEACHING NOTES

Learning Objectives and Audience Indication for Teaching Case Use

The use of the Teaching Case is recommended for lato sensu undergraduate and postgraduate courses in Business Administration and Accounting, it can also be used in a multidisciplinary context in the field of Social Sciences focused on business. Specifically, the use of this Teaching Case is recommended for the disciplines of Strategic Planning, Corporate Governance, Corporate Social Responsibility and Environmental Accounting, Accounting and Management Theories.

The case seeks to foster student learning by:

- A. The. Improvement of knowledge - regarding the need for an organization to receive and maintain legitimacy in the environment in which it operates, as provided by the Theory of Legitimacy from the perspective of Suchman (1995); the importance of socio-environmental aspects for organization and society; and the consequences and scope of corporate conduct.
- B. Skill building - creativity and abstract thinking; critical knowledge; scenario analysis; identification of problems, threats and opportunities; and strategy formulation.
- C. Attitude development - teamwork and intellectual multidisciplinary.

The case method does not require previous readings. However, if the teacher prefers to follow a hybrid method that best suits the characteristics of the class, they may ask students to read the Theory of Legitimacy, this Teaching Case and news about the breach of the Fundão and Santarém dam. In Mariana. As with other cases of natural disasters involving ore tailings dams, to foster further discussions.

Data Sources

This Teaching Case was prepared based on the events related to the environmental and social disaster caused by the Samarco dams rupture in

2015. The information that makes up the descriptive reports of the event was obtained by reading the annual financial and sustainability reports of Samarco. Samarco, news published in newspapers and magazines of great circulation of the country.

Thus, data were collected from April to June 2018, by searching the main news in the media (major newspaper and magazine websites) about the environmental and social disaster caused by Samarco. The documentary analysis of this material made it possible to follow the facts that occurred before and after the event, serving as a basis for the development of the present Teaching Case.

Pedagogical aspects

To conduct this Teaching Case, the teacher will need at least 4 class hours. Therefore, it is recommended that the following procedures be followed:

- A. The. In an hour / class, the lecturer should make a dialogued presentation about the assumptions of the Theory of Legitimacy, seeking to build a critical and reflective thinking about the subject, especially with regard to the dynamics of the organization, maintain and regain legitimacy in the environment. which the company operates;
- B. B. Within two hours / class, the teacher should ask students to form five groups to read, discuss and answer the questions of the Teaching Case; and
- C. C. In the last hours / class, each group will answer a question and debate the question answered by another group, it will be up to the teacher to choose at random who will be responsible for answering and debating. Finally, the teacher should make a critical analysis of the students' responses and raise the positive points, indicating complementary readings to deepen the theme.

Please be advised that the suggested procedures are optional, ie, it is up to the teacher to conduct the application as it considers most appropriate, based on the class profile and maturity.

THEORETICAL EXPOSURE AND DISCUSSION QUESTIONS

In this section we present a brief summary about the Theory of Legitimacy in order to assist in the development of this Teaching Case. Therefore, the focus of Suchman's (1995) perspective was that it considers that the organization is inserted in an environment of challenges and legitimacy strategies that contemplate the pragmatic, moral and cognitive level. These legitimacy strategies are differentiated by several aspects, the pragmatic level is less durable and more easily reached, while the levels: moral and cognitive, are more robust and consequently more difficult to reach (DUFF, 2017). In addition, legitimacy was discussed through the dissemination of practices to correct misconceptions (illegitimacy) from the perspective of several authors, such as Deegan (2002), Deegan, Rankin and Tobin (2002), Eugênio (2010), Loh, Deegan. and Inglis (2015).

Legitimacy Theory in Suchman's Perspective

The literature on legitimacy divides it into two distinct groups - the strategic and the institutional. Strategic legitimacy takes a managerial perspective and emphasizes the ways in which organizations instrumentally manipulate and deploy suggestive symbols for social support. While institutional legitimacy is more used and emphasizes the way in which the sector-wide structuring dynamics generate cultural pressures that transcend the intentional control of any organization (SUCHMAN, 1995).

According to Suchman (1995), legitimacy can be highlighted in three types, which can be called pragmatic legitimacy, moral legitimacy and cognitive legitimacy. All three involve a widespread perception or assumption that organizational activities are desirable, appropriate, or appropriate within a socially constructed system of norms, values, beliefs, and definitions. However, each of the three strategic typologies is based on a different behavioral dynamics: pragmatics is based on the evaluator's self-interest; while moral and cognitive imply cultural rules.

Pragmatic legitimacy is based on identifying the self-interest of the most immediate public of an organization. Often, this immediacy involves

direct exchanges between the organization and an evaluator group; It may also involve broader political, economic or social interdependencies, in which organizational action, after all, can visibly affect social welfare. It is noteworthy that some economic activities are harmful to the environment and pose risks to the population, yet the exploitation of this economic activity may receive legitimacy from society. This occurs when a social group considers that the benefits of the activity outweigh the risks involved, so society's self-interest prevails.

Pragmatic legitimacy boils down to a kind of exchange legitimacy - evaluators support organizational policy based on the expected value of that policy to themselves; or by legitimacy of influence - the evaluators support the organization not necessarily because they believe it provides specific favorable exchanges, but because it considers the organization receptive to its larger interests, that is, the organization adds societal interests in its political structure (SUCHMAN, 1995). For a better understanding, consider that a company degrades the environment to extract the object of exploitation of economic activity, enabling the generation of economic return for society as a whole, in the form of job creation and tax collection. Thus, the social and environmental impacts will continue to exist, but it is legitimized by the economic development that the company operates.

Unlike pragmatic legitimacy, moral legitimacy is not based on judgments of a particular activity that benefits the evaluator. Society's assessment is based on the activities that have the characteristic of doing the right thing, and reflect the growth in whether the activity effectively promotes the welfare of society as determined by the socially constructed value system (SUCHMAN, 1995). However, the altruistic basis does not necessarily make moral legitimacy entirely free of self-interest. Organizations can make false statements within a constituted social system and reinforce those statements with empty symbolic gestures; or, moreover, society's perceptions of adequacy often coincide with the evaluator's interest with society's interest as a whole. In this sense, economic development is legitimate if the benefits, weighted by the harmful effects on society, are consistent with the values considered correct by society. If society considers the

harmful effects on the environment and the social acceptable, the activity will be legitimized. Thus, within society's value system, the organization can strive to just look coherent and ensure legitimacy.

Cognitive legitimacy may involve affirmative support for an organization or mere acceptance of the organization as necessary or inevitable based on some taken-for-granted cultural account. In this case, it is observed that there is not necessarily a positive or negative assessment in the behavior dynamics of cognitive legitimacy (SUCHMAN, 1995). In cognitive legitimacy two variants are particularly significant: comprehensibility-based and taken-for-granted-legitimacy. In cognitive legitimacy, the positive and negative reflexes of economic activity are unweighted. Economic activity is considered inevitable and essential from a cultural context, where it has always been legitimate. Variants of cognitive legitimacy include understanding that refers to the junction between broader values and what is perceived by society to provide legitimacy; and the taken-for-granted legitimacy which states that something that is taken for granted can hardly be changed.

Like most cultural processes, the management of legitimacy depends heavily on communication - in this case, communication between the organization and its various audiences. This communication extends far beyond traditional discourse, and may include a wide range of meaningful actions and nonverbal views. Thus, skillful management of legitimacy requires a diverse arsenal of techniques and a discriminative awareness of which responses are best from the situation (SUCHMAN, 1995). Also according to Suchman (1995) there are three facets to legitimacy - gaining legitimacy, maintaining legitimacy and repairing legitimacy - aimed at selecting strategies to respond to each on the pragmatic, moral and cognitive levels. Although most organizations pursue various types of legitimacy simultaneously, different legitimation strategies operate in different logics, and by distinguishing between pragmatic, moral, and cognitive techniques, it is clear that few organizations pursue the three forms of legitimacy equally. Also, depending on the context not all attempts at legitimation will be equally successful.

Question 1. Legitimacy is a condition or status, which exists when the entity's value system is aligned with the value system of a larger social system of which the entity is part. When there is current or potential divergence between the two value systems, there is a threat to the legitimacy of the organization, which in Samarco's case translates into difficulty returning to business after an event that led to the loss of its legitimacy. In this regard, point out reasons that make Samarco's operational activities desired, appropriate or appropriate within a system of values, norms and beliefs, from the pragmatic, moral and cognitive perspective.

Resolution Plan Question 1

For the resolution of Question 1 (one) the teacher may accept different levels of depth of response, given the degree of maturity of students regarding the Theory of Legitimacy. Thus, it is only recommended that the solutions be based on the Theory of Legitimacy and that students reflect as managers of the organization, as if the management and strategic decisions were within their competence.

Question 1 encourages students to analyze in a targeted way, especially from the strategic perspective perspective: pragmatic, moral and cognitive, how Samarco's activities are necessary to society to the point of legitimizing its operations, based on self-interest, the characteristic doing the right thing, or accepting the organization as necessary or inevitable. The student must reflect on the best perspective, that is, the one that would best help Samarco to demonstrate that he is desired, appropriate or appropriate to the value system of society. Although society is treated in a generic way, students should be led to reflect that there are heterogeneous groups inserted in the same environment and with different views from the same scenario.

Gain Legitimacy

When organizations join or develop new operations but have little knowledge of the social context, they may face the challenge of gaining acceptance of the social system, either by ownership of the activity or by validity as part of the industry. New operations are technically problematic, insufficient or institutionalized; therefore, early entrants must make more effort to gain legitimacy by externalizing a sense that new operations characterize a sector that already exists independently of new operations and that these will be integrated into pre-existing activities taken for granted (SUCHMAN, 1995). However, depending on new operations and their ability to integrate with pre-existing ones, new operations may need to be segregated so as not to compromise the legitimacy of pre-existing activities.

Strategies for gaining legitimacy are usually proactive, as managers have initial knowledge about the plan and the need for legitimation. Suchman (1995) emphasizes that strategies for gaining legitimacy fall into three groups: efforts to conform to pre-existing societal perspectives in the organization's current environment; efforts to select in multiple environments the audience that will support current practices; and efforts to manipulate the environmental structure, creating new audiences and new legitimizing beliefs. Organizations to gain pragmatic legitimacy through compliance must meet the substantive needs of various audiences or offer access to decision making, or both; To gain moral legitimacy for organizations, they must conform (align themselves) to altruistic ideals; and to gain cognitive legitimacy, it must adopt established models or standards.

It is noteworthy that organizations can gain legitimacy by selecting the environment. The simplest way to achieve such legitimacy is to select an environment that ensures the legitimacy of the entity as it stands, without having to resort to change in exchange for legitimation. Pragmatism selects a favorable environment through market research - the organization must identify and attract individuals who value the types of products or services that the organization can provide (SUCHMAN, 1995). The selection of the environment in moral legitimacy is limited to the choice of moral standards: Possibility of moral criteria remains quite broad, and the

weighting of selection depends considerably on the goal the organization has set for itself, and on the execution of the goal-related activity. Since the company may impose heavier obligations on entities providing certain particularly problematic goods and services. Managers can also practice selection in cognitive environments when they find themselves unable to operate in a single, coherent environment despite their best efforts. When this happens, managers can try to control conflicts by selectively reconfiguring environmental constraints, segregating environments (ignoring situations, showing cynicism, promising change) and serving one audience over another, or integrating environments (SUCHMAN, 1995).

In the strategy of legitimation through manipulation, managers extrapolate the selection between existing cultural beliefs and actively enact new explanations of social reality. Pragmatic legitimacy reflects the exchange and direct influence on relationships between organizations and specific individuals, and is usually the easiest way to manipulate legitimacy. Manipulation usually takes the form of product disclosure, as the organization tries to persuade specific individuals to value specific products. In addition, organizations can employ good image disclosure to accelerate barter relationships and stimulate more widespread assignments of good dispositions.

According to Suchman (1995), for individualized organizations, the best expectation is simply to accumulate a record of technical performance, but collective strategies are usually more powerful. Within the rationalist order, technical performance has indirect effects on moral dynamics, with the dissemination of attention-grabbing events, providing lasting validation to procedures and structures. Technical performance, in most cases, is socially constructed, so the emphasis on performance hardly hinders impression management - including, for example, selective disclosure of information. In manipulating the environment of cognitive legitimacy collective action becomes even more important. In the cognitive field, collective action usually takes the form of popularization (promoting comprehensibility by explaining new cultural formulations) or standardization (promoting acceptance by isomorphism).

Maintain Legitimacy

Suchman (1995) points out that maintaining legitimacy is challenging for the organization, but generally this task is easier than gaining or repairing legitimacy. Once legitimacy is achieved, it can become more superficial and routine over time. However, entropy (shape-shifting) is a persistent feature of social life, and few organizations can safely ignore the task of maintaining legitimacy altogether. Even the most legitimate organization is subject to abnormalities, errors, imitation failures, innovations, and external pressures that threaten legitimacy, especially if such adversities arrive quickly or are left unresolved for a significant period of time.

According to Suchman (1995), three aspects of legitimacy make its maintenance at least intermittently problematic: (a) society is often heterogeneous, (b) stability often entails rigidity, and (c) institutionalization often generates its own opposition. The first points out that legitimacy is represented by a relationship with society, and is not a property of the organization; and the institutional environment is fragmented, so satisfying the whole of society may not be virtually possible. The second is related to isomorphism or mutual adjustment, which limits the ability to respond quickly and adequately to changing conditions. If organizations become homogeneous while cultural environments remain heterogeneous, unfulfilled demands will create niches for entrepreneurs who plan and adopt innovative yet peripheral organizational forms (SUCHMAN, 1995).

The third aspect of legitimacy concerns the tendency that any degree of institutionalization, other than the take-for-granted amount, can generate its own opposition. Legitimation projects (particularly proactive attempts at publicity and popularization) often attract attention, and this attention is often hostile - because proactive managers have initially enlisted most of the attention of society potentially in favor of the legitimation project, and some of New critics can expect to delegitimize the entire industry by attacking its less institutionalized member. Or because the newly institutionalized organization is viewed by the industry as an unwanted external constraint (Jepperson 1991 apud Suchman 1995). Whatever the case, institutionalization can mobilize a new,

more radical opponent, so managers can hardly treat legitimation as a completed task.

Strategies for maintaining legitimacy fall into two groups: Noticing future changes - Focuses on improving an organization's ability to recognize public reactions and anticipate emerging challenges; and protecting past achievements - it consists of converting sporadic legitimacy into continuous legitimacy by policing internal operations to avoid errors, restricting highly visible legitimation efforts by more subtle techniques, and developing a defensive set of beliefs and attitudes (SUCHMAN, 1995). In the strategy of realizing future pragmatic changes, the organization must monitor multiple interests and, to that end, can lure society into organizational decision making — not to provide symbolic assurances to evaluators but to provide cultural insights to managers. In the strategy for understanding future moral beliefs, the organization must incorporate multiple ethics and seek professionalization by promoting certain organizational members to participate in external normative discourses (DIMAGGIO; POWELL, 1983). Finally, to realize future cognitive understandings, the organization must explore multiple perspectives and may establish specific divisions with the permission to question assumptions assumed to be right (ASHFORTH; GIBBS 1990).

Protection strategies often require more initiative than purely perceptive techniques. On protecting past achievements, at the pragmatic level, exchanges must be consistent and predictable, not only meeting the needs of the evaluators, but also eliminating uncertainties and promoting a sense of control of the evaluators. At the moral level, activities should exemplify responsibility, not only by refraining from inconsistency, but also by underestimating the role of purely instrumental or consequential concerns. At a cognitive level, the reports should be simple, not only explaining organizational behavior but also making it seem natural and inevitable.

Question 2. The Theory of Legitimacy argues for the existence of an implicit or explicit social contract obtained and maintained between organizations and society. If such a social

contract actually exists between Samarco and the company, what do you think are the likely implicit and explicit clauses of the contract?

Resolution Plan Question 2

The issue seeks to encourage reflection on what would be a social contract from the Theory of Legitimacy. The student must think that Samarco has been active in the mining sector for decades and that by a tragedy the activities were interrupted with no return date. Such a context induces the existence of a social contract that was initially obtained and was lost. The social contract for obtaining has implicit clauses (not formally agreed, but implied by the execution of the operational activity) and explicit clauses (formal agreements, rules and norms, which when broken compromise the continuity of economic activity).

From this, the student must reflect which are the main implicit and explicit clauses of the contract, which were broken. In addition, the student should be placed within the context of the case, as if it were the manager of Samarco, after identifying the broken clauses, which suggestions are possible to reconstruct them, there are priority clauses. Remember that Samarco is an open case, still unsolved, so divergent answers should be welcomed.

Repair Legitimacy

The challenge of repairing legitimacy resembles the task of gaining legitimacy; Unlike gaining legitimacy, reparation of legitimacy often represents a reactive reaction to an unforeseen crisis of meaning. These crises often occur when managers become entangled in their own legitimating habits and fail to perceive a decline in cultural support, until some important cognitive evidence (such as a disruption of resources) catches the attention of managers (SUCHMAN, 1995). There is a need for monitoring strategies to maintain legitimacy. Superficial strategies can cover the most important flaws, those that break legitimacy without being preceded by a reduction

in legitimacy. Therefore, in activities of high social and environmental impact, the permanent monitoring of events, which would lead to a sudden interruption of legitimacy, must also be part of the strategy designed to maintain legitimacy.

From the loss of legitimacy, reactive managers begin to deal with the problem, the usual legitimation strategies and customary allegations of legitimacy may already be discredited. To be accredited the reaction proposal (strategy to repair the legitimacy) needs to propose corrective solutions accompanied by effective results. In addition, the crisis of legitimacy can also separate managers from previously trusted external allies; Since legitimation is often mutualistic (interaction between both parties), the risk of negative contagion can lead long-term allies to dissociate themselves from a problematic counterpart (SUCHMAN, 1995), making it difficult to resume operational activities interrupted by the loss of legitimacy, which needs to be considered within the proposed reaction. While external allies may require even stricter institutional and bureaucratic processes in order not to be appointed as co-authors.

In strategies to repair legitimacy, most strategies used to gain legitimacy can be used to recover as long as the organization continues to enjoy some credibility and interconnection with relevant audiences. But if the organization has been fully delegitimized, it must first address the immediate reasons for the loss of legitimacy and then initiate more global legitimation activities. In particular, organizations must build a kind of firewall between society's perception of past actions and society's perception of ongoing general actions (SUCHMAN, 1995). The deviations that led to the loss of legitimacy need to be dealt with transparently, demonstrating that the new practices adopted differ from the previous ones, otherwise efforts may be discredited.

Crisis of legitimacy may occur due to performance issues, but most challenges are based on flaws in meaning: society begins to suspect that supposedly desirable outcomes are harmful, that supposedly effective procedures are false, or that supposedly genuine structures are misleading facades. Consequently, in the initial task of regaining legitimacy, managers

may try to deny the problem, hoping to dispel the pragmatic concerns of individuals, at least until the organization can mount a parallel reward to offset it; they may try to justify the loss of legitimacy by redefining means and ends retrospectively to make disturbing events appear compatible with current moral and cognitive beliefs; If managers cannot make a report that eliminates moral responsibility, they can try to preserve a minimum of cognitive legitimacy simply by explaining unexpected events in a way that preserves an otherwise sympathetic worldview (SUCHMAN, 1995).

The reasons that led to the loss of legitimacy direct what will be the measures taken to regain it. The misstatement that led to the disruption of legitimacy can occur sharply, casting doubt on the pragmatic legitimacy obtained by balancing the positive effects with the ill effects caused by the organization's operations. Harmful effects assume much greater relevance, nullifying the favorable aspects that warranted the exploitation of economic activity. When it comes to an economic activity that has as its intrinsic characteristic a fine line between favorable and unfavorable aspects, any deviation represents the partial or total loss of legitimacy. Therefore, organizations active in economic activities with high social and environmental impact need to be aware of the consequences of going beyond this fine line.

Legitimacy can also be regained through two types of strategic restructuring: creating monitors - allowing the organization to build a bond against future recidivism, for example by inviting the government regulator and society to participate in monitoring (pragmatic exchange); and dissociation - which employs structural change to symbolically distance the organization from bad influences, for example, by replacing executives to symbolize the desire for change, or to change procedures, structures, and places of performance (SUCHMAN, 1995), or to involve members of society. and perhaps allow them to participate in some of the company's decision-making processes (PARSONS; LACEY; MOFFAT, 2014).

The scale of the challenge of regaining legitimacy is given by the reasons and consequences associated with the loss of legitimacy. Restructuring can be a way to consider as long as it is done transparently and in

accordance with moral beliefs and values upheld by moral legitimacy. The change in the governing body of the organization may indicate that corrections are being made to ensure alignment between society's values and exploitation of economic activity; and efforts to mitigate the impacts on society, if any, need to be real. Any indications of recurrence of deviations may indicate even greater efforts to regain legitimacy following.

Question 3. The technique of legitimation can be symbolic (does not reflect actual changes in activities) or substantive (reflects actual changes in activities). What would be the possible symbolic and substantive techniques of Samarco legitimacy before and after the dam breaking event?

Resolution Plan Question 3

The proposed question aims to guide students to the discussion about legitimation techniques. The student should be led to reflect that legitimation is practical, but also involves disclosure technique; legitimation to occur must be disclosed, considering legitimacy as something perceived by society; and that what is practiced is not always disclosed and vice versa.

Recall that this Teaching Case seeks solutions to solve Samarco's crisis of legitimacy. Therefore, identifying misconceptions and wrong decisions made by managers are part of the solution. It is suggested that before answering this question the student reads the topics "Samarco: periods before the accident the Fundão and Santarém dams" and "Samarco: during and after the tragedy in Mariana" and identify the legitimation strategies to maintain and regain legitimacy. On symbolic legitimacy reflect how an award-winning company with decades of industry expertise lost its legitimacy in one day; furthermore, ask yourself if symbolic legitimacy can still be an alternative for the company. All of these contextualized reflections help enrich the response.

Additionally, aspects of cognitive legitimacy can be explored to regain legitimacy. If economic activity is essential, the broader social context can be used to appeal to the importance of rebuilding legitimacy, because the organization has a cultural importance that is harder to break. Therefore, if economic activity is part of the social and cultural context of that society, the social contract can be more easily reconstructed.

Question 4. The Theory of Legitimacy is within the context of environmental theories, which argue that the environment affects, imposes limits or cooperates with the organization. If this is true, considering that Samarco is a relevant company for economic development. What do you think are the strategies to be used to regain Samarco's legitimacy?

Resolution Plan Question 4

Theory recognizes that legitimacy is gained, lost, or recovered from the firm's interaction with the environment, but that the environment is decisive for the organization. The student must interpret, in this question, the environment as a holistic space, which is influenced by a system that involves political, legal, economic, social, environmental and other aspects. Thus, to solve question 4 (four) students should focus on the strategy that should be adopted by Samarco to regain its legitimacy, from this context.

Legitimacy and Disclosure Theory

Companies are worrying about environmental issues, as their actions are increasingly visible and monitored (PLETSCH et al., 2015). In this context, disclosure assumes an important role in the process of legitimation. Deegan (2002) states that there is an interrelation between organization and society, that is, that politics, the economy and the community are inseparable and that economic analysis cannot be performed without considering the aspects of social, political structure. And institutional of the environment in which the activities are carried out. Still, according to the author, organiza-

tions exist to the extent that society in particular considers them legitimate, and if this is the case, society gives the organization the state of legitimacy. Legitimacy is socially constructed as it reflects a congruence between the behaviors of the legitimized entity and the shared beliefs of some social group; thus, legitimacy depends on a collective public, but independent of specific observers (SUCHMAN, 1995, FANK; BEUREN, 2010).

For Wink et al. (2016) This theory is based on the idea that there is a social contract between organizations and the community, representing a set of implicit or explicit expectations of its members. The social contract assigns meaning to the operations of organizations, considering them necessary within the constituted value system. Therefore, entities must conduct their actions within the limits considered acceptable by society, aiming to justify their continuity. Otherwise, society will gradually undertake to revoke the social contract. Deegan (2002) argues that in order to avoid contract loss and influence external perceptions, the company needs to demonstrate to society its importance and legitimize its actions through corporate disclosure policies. Disclosure can occur in various ways such as formal reports, social media (CASTELLÓ; ETTER; NIELSEN, 2015), press release, video conference, management analysis interview and discussion, among other forms.

Corporate disclosure policies should be oriented to consider: the state, the public, the financial community, and the media, as these actors have the potential to outline initiatives that can interfere with the legitimacy of companies. At the same time, to be legitimate, companies need to transcend the economic sphere, establishing congruences between their actions and society's expectations (DEEGAN, 2002; DEEGAN; RANKIN; TOBIN, 2002, LOH; DEEGAN; INGLIS, 2015). In this perspective the disclosure of social and environmental information can be considered a technique to legitimize the company's activities (DEEGAN, 2002; EUGENIO, 2010), helping to maintain good relations with the relevant public (MICHELON; PILONATO; RICCERI, 2016), either to obtain, maintain or regain legitimacy. Under the context of legitimacy theory, it can be argued that potentially polluting companies are more pressured by society to invest,

adopt socially responsible practices (MACHADO; MACHADO; MURCIA, 2011) and subsequently disseminate them (BURGWAL; VIEIRA, 2014), in order to achieve social legitimacy and correct the gaps in meaning.

Eugénio (2010) argues that legitimacy is a resource that organizations need for their continuity, so whenever managers consider that the resource is vital to the continuity of the organization, they will implement strategies to ensure the continued provision of such a resource. The legitimacy strategy identified in environmental and / or social disclosure has become one more element to be used by companies for social legitimation (MACHADO; OTT, 2015, RUFINO; MACHADO, 2015). The strategy may take the pragmatic, moral or cognitive form to obtain, maintain or regain legitimacy (GUBIANI; BEUREN; SOARES, 2013). In general, the process of recognizing and breaking the legitimacy of companies is a fine line in the companies' social contract with society, so corrective strategies must be carried out constantly through evidence that provides insights that fit the expectations of social actors.

The entities with the greatest impact on the environment need to legitimize their attitudes through disclosure (BATISTA; CRUZ; BRUNI, 2016). The strategy of legitimation through disclosure is also a response to news stories linked in the media, which have contributed to shaping society's perception of the organization. At the same time, the legitimacy strategy must be developed in response to negative news, but considering the favorable aspects that will help shape the process of accepting economic activity as necessary for society.

Question 5. The activities developed by the mining companies are considered of high known risk. Research shows that companies in sectors with high environmental and social impact engage more in corporate social responsibility practices as a means of mitigating environmental and social damage. The Theory of Legitimacy recognizes that for legitimacy to be achieved, the dissemination of practices is essential. In this context, how do the facets of gaining legitimacy,

**maintaining legitimacy, and regaining legitimacy explain
disclosure?**

Resolution Plan to Question 5

This issue should lead students to reflect disclosure as a necessary means to achieve legitimacy. Constant and dynamic legitimacy strategies and challenges require organizations to pursue more effective dissemination tactics through the selection of material and information linking channels. Practices of legitimation, ie, to win, maintain or recover, need to be disclosed, otherwise a good legitimation strategy may not be perceived by society and, consequently, the expected results do not occur.

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ABOUT THE AUTHORS

MARIA AUDENORA RUFINO *maryaudenora@hotmail.com*

PhD Student in Accounting Sciences - UFPB

Institutional bond: Federal University of Paraíba

João Pessoa/PB - Brazil

Area of interest in research: Financial Accounting, Economic Regulation and Corporate Social Responsibility.

Av. Ver. Olímpio Grande, s/n - Porto Itabaiana/SE 49500-000

POLYANDRA ZAMPIERE PESSOA DA SILVA *polyandra@live.com*

PhD Student in Accounting Sciences Area: Accounting Sciences - UFPB

Institutional bond: Federal University of Paraíba

Juazeiro do Norte/Ceará - Brazil

Areas of interest in research: Corporate Finance; External Accounting and Quantitative Methods.

WENNER GLAUCIO LOPES LUCENA *wdlucena@yahoo.com.br*

PhD in Accounting Sciences - UFPB

Institutional bond: Federal University of Paraíba

João Pessoa/PB - Brazil

Areas of interest in research: Behavioral Accounting.