

Social and Environmental Responsibility as a factor of Productivity in a small Construction Company

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Abstract— The construction industry is a major generator of environmental impacts, yet it is an activity that has great potential for progress in a region. Even a small business has the potential to leverage an economy and thinking about it this project sought to verify the impact that employee valuation and environmental responsibility must make it more competitive in the face of such a demanding market. Thus, based on the principles of ISO 26000, several social and environmental changes in the company were proposed and implemented that generated significant financial returns for the organization.

Keywords— Building Industry, Social Responsibility, Environmental Responsibility.

I. INTRODUCTION

In an increasingly competitive and dynamic market, companies have sought to strengthen themselves through environmental policies that are interconnected with the increasingly demanding demands of customers.

For the implementation of social and environmental policies in the company must be made behavioral and structural changes in the corporation. According to Dechezleprêtre (2017), environmental regulations generally require facilities to perform pollutant reduction activities and may impose costs on companies, these costs are diluted over time by reducing consumption and energy waste.

Relatively simple measures can become a great waste and cost reducer such as replacing plastic cups with mugs, switching from ordinary bulbs to LED bulbs among others. By reducing the environmental impact, the company can enhance its image and increase its profitability and competitiveness in the market (ALMEIDA, 2017).

From 2005 the first international standard of corporate social and environmental responsibility began to be considered, and its publication took place in Geneva, Switzerland in 2010 (NUVES, 2015; OLIVEIRA, 2015; ROSA, 2019). Completed under the name of ISO 26000, it has a very different characteristic from the others as there is no certification, its guidelines are voluntary, as guidelines rather than rules (DE SOUZA, 2016).

This standard has 07 basic principles such as: responsibility, transparency, ethical behavior, Respect for

stakeholder interests, legality, international standards and human rights (GONÇALVES, 2018; ALVES, 2016).

The construction company studied, source of this article, sought to meet at least six of the seven principles previously mentioned, leaving only international standards to the background. Partly because it has a limited size and does not operate in the foreign market.

As main objective this work sought to make a diagnosis of the problems that the company had and to present the changes achieved from the implementation of social and environmental responsibility actions.

II. METHODOLOGY

2.A. DIAGNOSIS

The company studied operates in the construction industry, having as its main source of cash small industrial and domestic reforms, with 26 scheduled services on average per month with annual revenues of approximately 4 million reais in 2018.

The company office, with 50m², worked in a house bought by one of the partners of the construction company and was partially adapted, but with great limitations of access, safety, comfort and brightness.

The company had 4 employees working in its own office: the director who also assumes the position of engineer and technician responsible for the works, 01 administrative assistant who accumulated the function of technician in occupational safety and responsible for the

licensing of the works and the attendance of phone calls, 01 general services and a concierge.

There was no clear definition of what the role of each employee was, and actions were provided as the needs of the company emerged.

In the field, the external collaborators, that is, those who are available on site are hired as the services appear and all work in the form of service provided by providing municipal invoices for each service performed. The construction company has an average of 90 employees in this situation. This creates a major administrative problem for the company and a disruption for employees who cannot plan in the long run.

Most external employees did not have adequate training for their duties, this problem was due to the high turnover of employees and often the company had to quickly find available professionals for a service.

2.B. WORK ACCIDENTS

Accidents have always been constant and there was no complete follow-up by the occupational safety technician who had difficulties to follow alone all the company's works.

Although the use of PPE's (personal protective equipment) was required, there was no guarantee that employees would wear them. It was fatal to the potential for damage to the accident.

According to surveys of the occupational safety technician, between March 2014 and July 2019, the company accounted for 208 accidents in various services in the capital, as shown in figure 01.

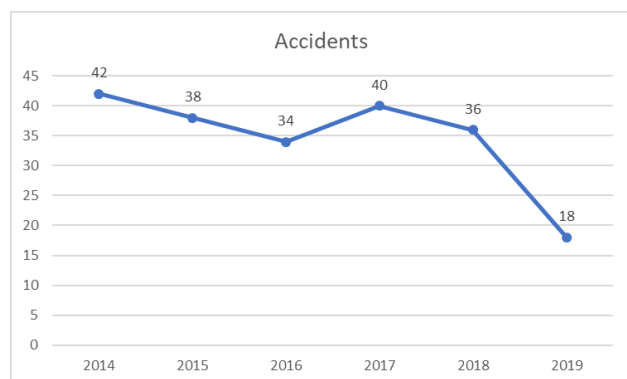


Fig. 1: Graph of accidents between March 2014 and July 2019.

2. C. CUSTOMER COMPLAINTS FOR SERVICE ISSUES

Cases of complaints about delay in construction, services below customer expectations, lack of education of contractors and inadequate rubble management were raised.

As for the delay of the works, the biggest complaint from customers was about the beginning of the service. In part, because of the amount of service the company had, it was normal for the delay in completing one service to interfere with the start of another.

There were also high rates of complaints about the poor quality of service. There were several cases where clients refused to pay for the work given such frustration, some more punctual cases the client even allowed the company to redo the work.

The most emphatic observation of customers was due to two aspects, the lack of education with which the employees dealt with a suggestion on site and the destination given by the company to the generated debris.

Because most of the renovations were carried out in condominiums and they had very strict living rules and procedures, many customers reported that they were required to pay fines for rubble left on the solid waste sites of residents. All these complaints are best verified in figure 02.

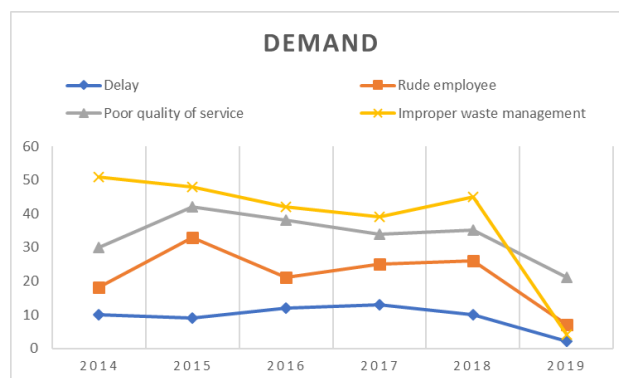


Fig. 2: Graph of demand between March 2014 and July 2019.

2.D. ENVIRONMENTAL MANAGEMENT

Not only the waste left unevenly on site, but other simpler environmental issues, such as replacing fluorescent lamps, which have high energy consumption.

Regarding the company's lamps, it was verified that two of them were never turned off, since they were directly connected to the network. These lamps are located at the front and the other in the side garage area.

Water consumption was another factor that directly influenced the company's high costs, as there were several leaks in the toilets and vehicle wash area.

2.E. RESPECT FOR STAKEHOLDER INTERESTS

During the first four years of the company, decision-making has always been aimed at meeting the needs of the main partner and the two investing partners. That way,

what was good for the directors was good for the company.

With the proposed valuation of employees, they became important in the decision-making chain of the construction company, so that they could decide, for example, if a material or PPE was appropriate over its price, or if food suppliers were or unable to continue providing to the company.

III. RESULTS

In order to value the employee as well as care for the environment and the community inserted in it, basic principles of social and environmental responsibility, were implemented some guiding measures for the future of the company.

3.A. EXPANSION OF OFFICE STAFF.

New employees were hired to compose the company's administrative team. Although the contraction by itself does not correspond to a social and environmental action, it came as a support for the decentralization of functions accumulated by the company director and his occupational safety technician.

One civil engineer, one environmental technician, one cadist, one attendant and one accounting assistant were hired.

3.B. EMPLOYEE TRAINING

For each employee a training was set up based on their role within the company, so the company can form a more efficient employee and, mainly, engaged in the company's culture and mission.

POPs (Standard Operating Plans) were created, a detailed description of all measures required to perform a task, enabling employees to have a standard as a reference.

For each service a playbook was created based on their respective POPs. As a result, even hard-working employees may have made it easier for them to access content. Thus, in the execution of a certain service, instead of having the bricklayer must be willing to read long and tiring POPs, just read a booklet with images and simpler language developed by the company, as in figure 03.

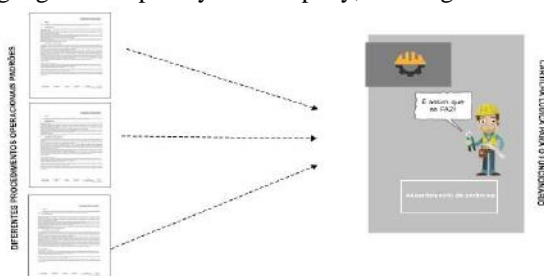


Fig. 3: Procedure books for employees.

3.C. ENVIRONMENTAL PROJECTS

As verified in the diagnostic phase it was possible to conclude that the company wastes large amounts of financial resources, mainly with electricity, water and plastic cups.

For electricity expenses it was possible to analyze the history of the company with ELTROBRÁS since 2014, it was possible with surveys of water consumption expenses. For the consumption of plastic cups, the company only has records from 2017 to 2019, when the company's security technician began accounting for this cost. Thus, it was possible to verify the exponential cost reduction, falling almost in half with only small behavior changes. Each year was taken a monthly average and reached very favorable numbers, as shown in figure 04

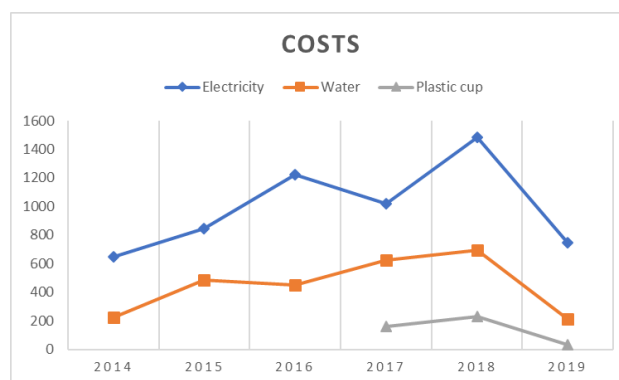


Fig. 4: Graph of the costs of water, electricity and plastic cups.

IV. CONCLUSION

It was possible to conclude that the project executed in the company had several favorable results for the organization as reduction of costs of electricity, water and glasses, avoiding the ordinary waste of the company.

The change in employee behavior came in part because they felt more valued at the construction company, both because they were embedded in company policy and decision making.

The results were also favorable for the community, as employees are more likely to volunteer, as they are more motivated to become knowledge multipliers.

This project lasted only 4 months but considerably reduced costs and increased the company's competitiveness as customers already feel the change in company culture, especially in customer service and treatment of construction debris.

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