CASE STUDY

Critical success factors in integrating sustainability with quality in a food and beverage company

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ABSTRACT

Goal: Analyzing critical success factors (CSFs) for integrating sustainability and quality in a food and beverage company in Rio de Janeiro, Brazil.

Design / Methodology / Approach: This research relies on an exploratory method, applied on qualitative data collection based on a case study. The instrument for data collection is an interview with professionals who work in the areas of quality and sustainability in the company studied.

Results: Out of the seven critical success factors identified in an organization, six of them (leadership and commitment to strategy, management and monitoring of processes, training and communication, commitment to the three pillars of sustainability, product/service development and continuous improvement) are a result of the company's strategic circumstances, achieved by continuously improving products and processes. On the other hand, there is a critical focus factor for stakeholder relations, since it is currently very concentrated on the interests of final consumers to the detriment of other stakeholders.

Limitations of the investigation: Results reflect the Brazilian headquarters of a multinational company of the food and beverage sector and, therefore, cannot necessarily be applied to other companies of the same sector.

Practical implications: Diagnosing seven critical success factors of the studied food and beverage company raises the opportunity to seek mechanisms to strengthen the focus on stakeholders, a critical factor identified as incipient in the research.

Originality / Value: Findings confirm the relevance of looking into the critical success factors identified by the literature about integrating sustainability and quality in the practice of industries.

Keywords: Sustainability; Quality; Critical Success Factors; Integration; Food and Beverage Company.

INTRODUCTION

In the last decades, more intensely since 1970, the greater international debate on the search for development models which reconcile economic growth, social justice, conservation and sustainable use of natural resources has resulted in several reports and conferences which have shown the tragic environmental situation in the planet (Mello et al., 2017; Siva et al., 2016).

This new agenda was initially discussed in international agencies, governments, non-governmental organizations (NGOs), educational institutions and environmental groups. This debate understood the importance of the participation of public and private

organizations in the search for a sustainable development model (Cherrafi et al., 2016; Engert and Baumgartner, 2016; Gimenez et al., 2012).

Corporate sustainability (Baumgartner and Ebner, 2010; Steurer et al., 2005) is achieved when sustainable development is incorporated by organizations. The term "corporate sustainability" is, thus, used to name the set of business activities which demonstrate the inclusion of social and environmental aspects in their operation and in their interactions with stakeholders (Van Marrewijk, 2003). This outlook is based on the so-called triple bottom line (TBL) concept, or on generating value by taking environmental, economic and social aspects into account (Elkington, 2012; Gimenez et al., 2012; Nichioka and Quelhas, 2010).

Several voluntary standards of corporate sustainability which address companies' conduct and business practices related to handling environmental, economic and social aspects have been developed. Some examples are norms such as *NBR ISO 14001* (Associação Brasileira de Normas Técnicas, 2015b), *NBR ISO 26000* (Marques et al., 2018; Associação Brasileira de Normas Técnicas, 2010), *NBR ISO 45001* (Associação Brasileira de Normas Técnicas, 2018), *AA 1000* (Marques et al., 2018; Accountability, 2008), *SA 8000* (Social Accountability International, 2008) and the *Global Reporting Initiative Guidelines* (Marques et al., 2018; Global Reporting Initiative, 2015). Some of these standards, along with other corporate sustainability initiatives, have been influenced by quality management (Siva et al., 2016).

Therefore, the alignment between quality and sustainability areas is visible in sustainability tools inspired by quality management models, such as ISO 14000 Environmental Management Standard, published in 1996, which has a strong relationship with the ISO 9000 series (Carvalho, 2017). This alignment also informs the evolution itself of total quality management (TQM) for excellence models represented by country-level quality awards which aim to serve the interests of a broader group of stakeholders rather than just shareholders (Miguel, 2012).

This alignment is also evident in the combined management of quality systems and sustainability norms, through integrated management systems (IMS) which integrate the environmental perspective, occupational health and safety, and social responsibility to quality management (Carvalho and Miguel, 2012).

In this sense, a reflection on critical success factors (CSFs) is relevant in order both to integrate sustainability and quality and to ensure a competitive performance for companies (Rockart, 1979).

Within this context, this article aims to analyze CSFs in the integration of sustainability and quality in a food and beverage company in Rio de Janeiro, Brazil. In addition to this introduction, this paper contains four more sections, the first of which presents a bibliographical review. The following section explains the methodology applied in this paper, while section 4 presents the analysis and discussion of results and the final section provides our final considerations. Thus, the main contribution of this paper is to synthesize CSFs identified in literature concerned with the integration of sustainability and quality, as well as to analyze them in the context of a food and beverage company.

LITERATURE REVIEW ON CSFS

Critical success factor theory recognizes that the companies which build certain CSFs can improve their competitive performance (Grimm et al., 2018). The model proposed by Aquilani et al. (2016) obtained a successful convergence of the CSF which integrates sustainability and quality. Based on the model employed by them, our systematic literature review considers digital scientific databases such as Scopus and Web of Science. We used some keyword combinations in order to collect papers identifying the most relevant CSFs linked to our field. The parameters and results of this process are in Table 1. Likewise, Table 2 shows the data crossing between the CSFs identified and the authors who referenced them.

Table 1. Parameters and results of the literature review

Phase	Description	Number of papers	
		Scopus	Web of Science
1	**Total papers containing at least one of the 4 following keyword combinations**	**15**	**6**
	("TQM" AND "CRITICAL SUCCESS FACTORS") AND "SUSTAINABILITY" (in abstract or title)*	5	1
	("SUSTAINABILITY" AND "CRITICAL SUCCESS FACTORS") AND "TQM" (in abstract or title)*	2	1
	("QUALITY MANAGEMENT" AND "CRITICAL SUCCESS FACTORS") AND "SUSTAINABILITY" (in abstract or title)*	2	1
	("SUSTAINABILITY" AND "CRITICAL SUCCESS FACTORS") AND "QUALITY MANAGEMENT" (in abstract or title)*	6	3
2	Not duplicated papers (out of 21 previously selected papers)	8	
3	Relevant papers (out of 8 not duplicated papers)	2	
4	Papers retrieved checking the references provided in the relevant papers above	23	
	Total papers (relevant papers + papers retrieved from their references)	**25**	

* Keyword input order on search engines affected results. Source: The authors themselves, based on Aquilani et al. (2016).

Leadership and commitment to strategy were reported by 36% of the references as the main factors of successful decision-making and implementation. The role of leadership is to commit to strategy and implement sustainability and quality practices through the integration of different systems within an organization.

Management and monitoring of processes (for articles 2, 3, 12, 15, 19, 23 and 25) were held, on the one hand, by adapting processes and, on the other, by adapting the system as a whole, in order to meet the needs of each management area. Continuous monitoring was also required. measurement and control are essential in order both to ensure that the organization remains aligned with what is expected and to identify any type of deviation or failure as quickly as possible.

As far as focus on stakeholders is concerned, the analysis of articles 2, 3, 6, 7, 8, 12 to 15, 20, 23 and 24 reveals that each organization has a group of stakeholders and their corresponding expectations to meet in the area of sustainability and quality. The goal is to identify stakeholder requirements and align them with organizational strategies, as well as to establish short and long-term relationships.

For the integration of sustainability and quality, human resources management (HRM) assumes a strategic role. Management involves manpower planning, recruitment, training, performance appraisal, and reward systems. Employee training is important so that, in addition to being engaged, each individual has the skills required by their tasks, contributing to a systemic perspective and integration between areas (articles 3, 5, 15, 16, 17 and 23).

Committing to the three pillars of sustainability was remarked by 9 out of 25 references as the main factor in successfully implementing corporate sustainability. Its concept is linked to providing goods or services using natural resources as little as it is economically viable, resorting to alternative, safer forms of energy for employees, society and consumers. The preservation of natural resources impacts the environmental pillar and guarantees a better prospect for future generations. Making the organization grow while causing as little environmental impact as possible causes a positive effect on the economy of the community in which it is embedded, promoting positive impacts on the social sphere through the creation of jobs and better working conditions.

Product/service development is the delivery of a product or service which exactly meets consumers' requirements by representing a competitive advantage within the market. However, the success of this factor requires an interface between quality and sustainability through quality

tools. Among them, quality function deployment (QFD) stands out by enabling the collection of information about customer needs in the process of designing an ideal product while avoiding reworking and resource waste. According to the TBL, these resources should be treated as a priority due to their impacts on the environment and society (articles 3, 19 and 24).

As reported by articles 3, 12, 15 and 16, continuous improvement is one of the central goals of successful managing. By constantly reassessing the *status quo*, it seeks for improvement at all business stages, that is, it is a key element in the pursuit of excellence as an organization. Continuous improvement is applicable in the articulate management of systems, aligning quality and sustainability, developing products and services for consumers, and tailoring practices to sustainable standards. This cycle, which encompasses constant observation, as well as the study of and the search for optimization, must be intrinsically incorporated into a company's culture and routine. Continuous improvement to a system's interface should assure the company that the methodology is being used for sustainability, so as to constantly seek for greater efficiency in the use of natural, economic and social resources.

Fully implementing continuous improvement in an organization essentially means, according to the references, going through continuous reconfiguration and development of key processes and competences. Finally, Aquilani et al. (2016) state that such a philosophy must be always present when defining strategic objectives for the company while keeping staff motivation and interest, which creates a healthy collaborative and learning environment.

Table 2. Data crossing between identified CSF and referenced authors

Nº	References	Critical Success factors						
		Leadership and commitment to strategy	Management and Monitoring of Processes	Focus on Stakeholders	Human Resource Management	Commitment to the three pillars of sustainability	Product/Service Development	Continuous Improvement
1	Kannan (2018)	X				X		
2	Fundação Nacional da Qualidade (2016)	X	X	X		X		
3	Aquilani et al. (2016)		X	X	X	X	X	X
4	Alhaddi (2015)	X				X		
5	Almeida et al. (2014)	X			X			
6	Riley (2014)			X				
7	Kalra and Pant (2013)			X				
8	Zamcopé et al. (2012)			X		X		
9	Kassai et al. (2011)					X		
10	Goel (2010)					X		
11	Baumgartner and Ebner (2010)	X				X		
12	Jamali et al. (2010)		X	X				X
13	Korkmaz et al. (2010)			X				
14	Beato et al. (2009)			X				

Table 2. Continued...

Nº	References	Leadership and commitment to strategy	Management and Monitoring of Processes	Focus on Stakeholders	Human Resource Management	Commitment to the three pillars of sustainability	Product/Service Development	Continuous Improvement
15	Mohammad et al. (2005)	X	X	X	X			X
16	Zutshi and Sohal (2005)	X			X			X
17	Avelino (2005)				X			
18	Krajnc and Glavic (2005)					X		
19	Kaynak (2003)		X				X	
20	Spangenberg and Pfahl (2002)			X				
21	Samson and Terziovski (1999)	X						
21	Abarca (1998)	X						
23	Beechner and Koch (1997)		X	X	X			
24	Elkington (2012)			X		X	X	
25	Evans and Lindsay (1993)		X					

Source: The authors themselves.

METHODOLOGY

This is an exploratory article, which applied qualitative research methodology based on a case study. This method was applied to the case of a multinational food and beverage company called Alpha. As Yin (2010) points out, case studies bring together several sources of evidence aiming at the in-depth study of a particular phenomenon or social reality.

Primary data collection included two interviews in October 2017, carried out at Alpha's facilities in the city of Rio de Janeiro, Brazil. The interview script is transcribed in Appendix A. Interviewee A holds a degree in Economics and has been working in the company for 16 years, having held the position of Director of Shared Value and Executive Director of Alpha Institute for 2 years. His function relies on governance and the company's sustainability strategy, going through the entire value chain. His main objective is to assess how the company can minimize environmental impacts and maximize social and economic impacts on society and on the community in which it operates.

Interviewee B has a degree in Chemistry and a postgraduate degree in Quality, Environment, Project Management and Safety. He had held the position of Food Safety Consultant for 1 year and a half, but has been working in Alpha System's factories for 6 years in the Quality, Safety and Environment (QSE) area. His role within the department is to lead the team responsible for crisis management and brand exposure concerning the topics covered by the area. In addition, he leads the company's returnable PET packaging (RefPet) quality area, sensorial leader programs, training the corporation's leaders with the skills required and QSE standards aligned with global Alpha. He also coordinates the company's water input program, monitoring the used water's quality and destination.

In order to register collected information, we used notes and a recorder. These methods made the interviews and transcripts quicker and more efficient. In addition, using a recorder ensued a high degree of reliability, since it collects data with greater detail, making it easier to analyze obtained information later.

INTERVIEW RESULTS

Company description

The company is an originally American multinational. In Brazil, it has been operating for over 70 years and its head office is in Rio de Janeiro (RJ). The company's franchise is responsible for 9 manufacturing groups and one food and beverage joint venture with approximately 40 factories, which on the total gather around 50,000 employees. It operates in the production of non-alcoholic beverages, including water, teas, soft drinks, nectars, juices, sports drinks, coffee, dairy products and soy-based drinks, totaling more than 200 products, including regular flavors and their low calorie versions.

Quality, sustainability and management system

Alpha's emphasis on quality is present in all its operations. According to Interviewee B, the Technical Vice-Presidency at the Rio de Janeiro head office is responsible for the Quality Board, which rules over the franchised group and is locally responsible for the implementation and control of quality guidelines. Such procedures have universal standards, and any change in the multinational's head office is automatically applied to all other units in different countries. The interviewee points out that some of Alpha's quality standards are often more demanding than local laws and regulations themselves. He underscores the importance of quality guidelines as a way to ensure the same quality standard for all of the company's products.

Sustainability, according to Interviewee A, is the correct way to operate according to the values and principles preached by the company. He concludes that, when a decision potentially impacts the organization, it cannot be treated separately from a decision which impacts the society in which they are embedded. He points out that the goal is to "internalize what is external" in the business, and to look at this objective from the point of view of competitive advantages. For example, when managing water, it is not enough to work efficiently within the factories; it is also necessary to serve the productive chain and the communities where it is operating so as to avoid water shortages. Additionally, the company is also responsible for reverse logistics, considering the country's national waste policy, acting on packaging recycling and ensuring its implementation at all levels of the chain.

Interviewee A emphasizes that quality, safety and environmental policies are fully dealt with by the QSE area, which is assigned by the local head office global targets for local implementation within the value chain for farmers and bottlers of the Alpha System. He adds that, although the integrated management system (IMS) is not applied at the head office, all manufacturers must be certified in accordance with *NBR ISO 9001:2015* (quality management system) (Associação Brasileira de Normas Técnicas, 2015a), *NBR ISO 14001:2015* (environmental management system) (Associação Brasileira de Normas Técnicas, 2015b), *NBR ISO 22000:2019* (Associação Brasileira de Normas Técnicas, 2019) (food safety), and *OHSAS: 2007* (occupational health and safety management system) (British Standards Institution, 2007). In addition, a number of head office guidelines, when locally implemented, improve indicators and results for areas within the Alpha System.

Critical success factors in sustainability and quality integration

According to interviewees, leadership plays a key role in the company's commitment to quality and sustainability management. It is therefore treated as a priority. For Interviewee A, this notion contributes to an integrated management of processes, constituting a non-negotiable agenda

among the members of the organization and generating a great synergy among departments in the global commitment to these themes. It emphasizes transparency stemming from structured leadership, backed by an evaluation and reward system which ensures more engaged and motivated employees to participate in a sustainable business with high standards which are aligned with the strategic planning of the company.

Interviewee B reports on the importance of using tools which corroborate and legitimize leaders' decisions. In this sense, he mentions the use of control dashboards which display indicators in real time and assist in the constant monitoring of results proposed by the strategic summit. In addition, he describes the importance of integration meetings and meetings with superiors for periodic alignments, as well as of stimulating new ideas, focusing on decision making and people management, and not only on limited quantitative performance.

The importance of active leadership is related to the creation of an organizational culture which motivates all employees through efficient and transparent communication, seeking the objectives and continuous improvement for all processes. In this context, according to Mohammad et al. (2005), leadership takes on a more articulating role in opposition to the outdated perspective of centralization, finally allowing the opportunity for each hierarchical level to also develop its capacity to solve problems for the general good of the company. This fact shows that the studied company's current leadership model results from a concentration of efforts and commitment of all parties with the organization's strategy focused on, ensuring an integrative leadership leading to the implementation of goals and efficient resource management. Therefore, this critical success factor is aligned with the guidelines defined in the literature, making a relevant point with respect to the company's management policy.

When it comes to process management and monitoring, Interviewee A points out that each process within Alpha's value chain is designed in accordance with quality and sustainability standards in an integrated manner. In the sugar supply chain, for example, the company works with Bonsucro certification, which has an international standard for sustainable production (Bonsucro, 2013).

The same respondent explains that, in order to achieve these objectives and adapt them to the company's needs, the project is planned through technical meetings with the participation of the manufacturer and the global headquarters to discuss the guidelines of the production process, which involves expansion, adaptation and alteration of production lines. The next step is measuring the scale of infrastructure required by the activities. In this step, all the indicators potentially influenced by such implementation are defined — an increase in water consumption, for example. Also, for each new project, there is an internal certification process to ensure implementation in a satisfactory manner. Thus, in addition to certifying the quality and reliability of the process, it includes environmental value and also guarantees safety for all those involved in its operation.

In other to maintain monitoring, Interviewee B points out that compliance audits are held by managers from the international head office, who come to Brazil to analyze processes, and, finally, make an evaluation based on which a score is assigned to the national branch. This evaluation informs an action plan for any opportunity presented. As for cycles of control and continuous improvement, he reveals that statistical performance indicators about the processes undergo periodic reviews, being specifically assessed within each stage of production.

He also highlights the maintenance of audits for norms *NBR ISO 9001: 2015* (Associação Brasileira de Normas Técnicas, 2015a), *NBR ISO 14001:2015* (Associação Brasileira de Normas Técnicas, 2015b) and *OHSAS 18001: 2007* (British Standards Institution, 2007), as well as of internal audits in the manufacturing company by corporate auditors, who evaluate the factories without prior notice in the areas of quality, environment and safety. In addition, according to the interviewee, having identified a possible point of improvement, the manufacturer has the opportunity to present a proposal for action to validate the headquarters. If it is refused, the root cause of the proposal is revised until it complies with the standards set globally by the company.

Comparing the premises presented by authors 2, 3, 12, 15, 19, 23 and 25 with the organization's ideas and actions, this study verified that existing processes follow a specific structure, certification programs are implemented and statistical tools are used to support the achievement and development of each activity. In addition, compliance audits are also performed both at the company and at its suppliers in order to ensure excellence in production processes. Therefore, the research observed that process management and monitoring is a critical success factor in integrating sustainability with quality in the company.

Meeting the stakeholders' expectations is the fundamental pillar for the success of the organization. Therefore, Interviewee A emphasizes that Alpha's main stakeholder in Brazil are consumers. They are embedded in the center of business and strategies, and they are directly or indirectly impacted by the company's policies. All of the company's actions aim to meet the expectations of consumers. To that end, the interviewee explains that several other stakeholders, such as manufacturers, civil society, government, employees, academia, NGOs, press, medical community, employees and industry associations, after being mapped, interact in the business value chain, continuously seeking for synergy and balance in order to achieve what final consumers expect in the form of services and products.

According to Interviewee A, the company uses different channels for communication with stakeholders. For example, the channel opened by their customer support service, directly connected to consumers, is the place where main issues are raised and identified, whereas for other interested parties, a dialogue emerges within the group in which they are inserted, but the feedback from this close relationship is always used as an input for future strategic decisions.

In the scope of quality and sustainability, Interviewee B indicate the power of the legal sphere, emphasizing the importance of public institutions related to the environment, such as the Ministry of Agriculture, Rio de Janeiro State Institute for the Environment (INEA) and the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), which constantly participate in the organization's strategic talks. In addition, he says that, when these and other organizations review certain resolutions, Alpha participates in public hearings as part of society and take a stance on subjects discussed.

Mohammad et al. (2005) remarks that mapping stakeholders, precisely identifying their needs, requirements and related expectations, as well as communicating throughout processes are fundamental components of a good relationship between the company and stakeholders. According to the National Quality Foundation (Fundação Nacional da Qualidade, 2016), a good relationship also includes continuous and reciprocal feedback and information flows, in which the company collects data, for instance, from both market research and employee feedback.

Concerning meeting the expectations of the company's stakeholders, Alpha has a proactive perspective in Brazil, prioritizing final consumers, affected communities and government agencies. It values in-depth studies of the conditions and a close contact to favor the fulfillment of their demands and complaints. However, despite caring for the needs/expectations of stakeholders, the same care is not given to the other members of the chain, who sometimes have their own interests ignored, since the company focuses on consumers. This fact is evident in the communication channel: the company offers support to consumers, but, in contrast, does not offers specific channels to stakeholders, which can cause the loss of important feedback and hinder the identification of their interests and expectations.

Considering these factors, we can affirm that this critical factor of success deserves special attention, since final consumers are being privileged to the detriment of other stakeholders, and such an imbalance in meeting their interests may present medium and long-term risks for the company.

As far as training is concerned, Interviewee A states that the company has a training platform aimed at integrating all employees with regards to information about the brand, products and processes, including quality standards and sustainability. This enables the integrated dissemination of guidelines throughout the Alpha System. Finally, the interviewee

reports other internal human resources management tools, such as the One Voice System, used to convey technical knowledge about all stages of production processes and the value chain to employees, in order to guarantee the same level of education for all the people involved.

Interviewee B also emphasizes the role of the technical area as the main area in charge of company training all over Brazil. He highlights the partnership with the National Industrial Apprenticeship Service (SENAI) for the development of training courses for employees at different chain levels. The interviewee points out that such courses meet several strategic pillars, including quality and sustainability, focusing on environmental policies and occupational safety. Among the courses offered are, for instance: effluent treatment training with an operational character; food safety training; environmental management for company leaders. The interviewee concludes his participation by emphasizing that the segment, mainly within the factories, has a high turnover rate, which makes training even more necessary in order to train employees and align them to the organization's quality and sustainability standards.

Considering the aspects raised by 5 pieces of the referenced literature, as well as the scenario verified in the scope of the company studied, it is possible to notice that there is a well-structured human resources management program. Brand ambassadors stimulate engagement among those involved at all hierarchical levels of the chain, and training is jointly conducted, encompassing all strategic levels. This way of working enables the verification of the presence of this critical success factor in the organization and of its full compliance with the requirements defined by the theoretical framework.

Encompassing the three pillars of sustainability, respondents A and B are emphatic in saying that there are clear commitments and goals for all the partners and franchises part of Alpha System. The environmental, social and economic pillars are part of the company's strategy and all are reflected in many priority actions, such as commitment to saving water, to food safety and to working with efficient energy, according to Interviewee B.

In the social scope, Interviewee A highlights the company's performance in empowering communities through training, job generation and development support. These actions are provided to small retail companies in the regions affected by the production of inputs for the brand's products. This process starts, as the interviewee explains, with a detailed mapping of sale outlets in these regions and strong educational initiatives to promote young people's development and access to their first job, improving retail performance in the area and positively impacting the relationship of the community with the Alpha brand.

Interviewee B also reveals that the company has policies to guide suppliers as well as the rest of the value chain. They aim to fully meet human rights, guaranteeing employees fully decent and safe work conditions of. Continuous monitoring of goals, transparency of information and general commitment allow the complete implementation of this process, and, in the case of failure, the company immediately identifies the areas in need of change and provides solutions.

With respect to the commitment to the three pillars of sustainability, according to what was exposed by authors 1, 3, 4, 9, 10, 11, 14 and 24, Alpha Brazil's sustainable agenda appears to be very aware of such pillars, which favors a series of efficient practices, such as full water management and the energy efficiency program. This corroborates the establishment of high performance standards in the area. In addition, in order to reaffirm the organization's commitment to sustainable development, *NBR ISO 9001:2015* (Associação Brasileira de Normas Técnicas, 2015a), *NBR ISO 14001:2015* (Associação Brasileira de Normas Técnicas, 2015b), *NBR ISO 22000:2019* (Associação Brasileira de Normas Técnicas, 2019) and *OHSAS 18001:2007* (British Standards Institution, 2007) certifications are required from all branded product manufacturers. These actions and practices demonstrate the company's stance and proactive attitude, which confirms the identification of such a critical factor of success.

According to Interviewee A, the organization has robust methods for developing new products. He reinforces that their R&D department and their strategic planning area conduct extensive research and testing with consumers to establish their desires and expectations about products.

Interviewee B emphasizes that the consumer is not only interested in products' characteristics, but also in knowing the impact its production causes on the society in which the company is inserted. Their level of water consumption, gas emissions and the types of labor employed in their productive activities are some examples of typical points of interest cited by the interviewee, through which consumers show concern for the traceability of the production chain.

In terms of product development, articles 3, 19, and 24 link the success of such a process to consumers' acceptance. This requires, according to the authors, reinforcing the need for organizations to use tools able to identify consumers' real demands, such as QFD, and to translate them into ideal parameters for products with lower costs. Additionally, quality also assumes a key role due to its presence in processes ensuring that the products conform to full use by customers, building a significant competitive advantage.

The authors observed that the company studied features R&D and strategic planning departments which perform research and tests in order to gather information about consumers. Alongside this, the company is committed to quality and sustainable management of its products, characterized by initiatives which promote a wide variety of flavors and generate less waste, in order to bring more benefits to society. Therefore, research has demonstrated that this critical success factor is present in the company and is an important aspect in the integration of sustainability with quality in the development of its products.

For Interviewee A, continuous improvement is a philosophy broadly and intrinsically adopted by Alpha Brazil. He emphasizes that, for all processes, constant periodic evaluations identify improvement opportunities and guarantees more structured decisions.

The interviewee adds that, within the scope of quality standards, the company conducts daily critical analysis meetings to evaluate management system items which are critical to the company's system, drawing up action plans with the objective of constant development. Respondent B says that new quality/sustainability standards and legal changes are also addressed in a dynamic and proactive way, always focusing on continuous improvement. Meetings in dialogue with the environment and health and safety areas are regularly organized in the factories in order to deal with such issues and to advance any other points of interest.

Drawing a parallel with articles 3, 12, 15 and 16, and based on the results presented, it was possible to diagnose that the perspective of continuous improvement is widely stimulated in the company, and it is spread out from top managers to the most operational employees. Having meetings and periodic evaluations and also intensely focusing on society's norms and needs, the company manages the instruments that condition continuous development in processes and products. That said, the critical success factor in relation to continuous improvement is present and is very relevant in the integration of sustainability and quality.

FINAL CONSIDERATIONS

Considering that this study is limited to one multinational food and beverage company in Brazil, it's important to advise that the following results cannot necessarily be generalized to different companies in either this or other sectors.

In this way, generally, out of the seven critical success factors for integrating sustainability with quality, it is possible to conclude that Alpha Brazil exhibits satisfactory results in six of them, namely: leadership and commitment to strategy; management and process monitoring; training and communication; commitment to the three pillars of sustainability; development of products/ services and continuous improvement. The only factor in which the company needs improvement is the focus on stakeholders, since it shows an imbalance. In fact, the company, in spite of assuring the fairness of interests between all parts of the chain, places a clearly heavier weight on the needs of final consumers, to the detriment of other stakeholders. Therefore, the company needs to pay special attention to this aspect, since the maintenance of good relations with all branches can expand their horizons, generating several opportunities for continuous progress.

However, the integrated quality and sustainability management is remarkably natural to the organization, since it recognizes the gains are real when these aspects are treated as a part of the core business. The daily search for continuous improvement in the two spheres is notably present in each department, always aiming for better results and business leverage.

The company also ensures that this integrated management is inherent throughout its national system. The dissemination of knowledge and the training offered throughout the value chain, in addition to the certifications required for its manufacturers, ensure that management follows the standards established worldwide. The adaptability of the organizational culture and understanding about the changes that occur in the world and with consumers do not leave the company stagnant and promote a look at the future, aiming at a business that sustains itself with remarkable quality.

Sustainability is also increasingly becoming a priority on the company's agenda. The company's leaders must understand that, in order for the business to be sustainable in the long term, the company must contribute to the development of the society in which it operates, by preserving the environment and by keeping a good relationship with human beings.

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APPENDIX A: INTERVIEW SCRIPT

Part 1: Interviewee Characterization

1. What is your position within the company?

2. What is your professional background?

3. How long have you been working at the company? How long have you been in the current position?

4. Which are your responsibilities and activities in your current position?

Part 2: Quality, sustainability and management system

5. How is quality management of procedures and products handled at the company? Is there a department exclusively responsible for this? Does production follow good market practices, or are internal methodologies developed?

6. What is the importance of sustainability within the company's strategic decisions and how does the management of it affect the business?

7. Does the company address quality and sustainability management in an integrated manner? If so, what is the method to achieve it?

8. What is the business strategy behind the company?

Part 3: Critical success factors in sustainability and quality integration

9. What is the role of leadership in the company's commitment to the quality of its products and the concern for the economic, social and environmental impacts on society?

10. What strategic actions the leadership takes to ensure that employees have the same commitment?

11. How is each process within the company's value chain designed to integrate and achieve the different objectives in the areas of quality and sustainability?

12. How is continuous monitoring/controlling of processes performed on a day-to-day basis to ensure that established standards are met?

13. What are the main stakeholders for the business? What is the importance of meeting their requirements and expectations? How does the dialogue between them and the company occur?

14. How do communication and training through the system help guarantee that each employee's action is in accordance with the management's objectives of integrated quality and sustainability and its impacts on the operation?

15. What are the main initiatives/actions taken by the organization in terms of ensuring the perfect fulfillment of the company's strategic objectives related to the three pillars of sustainability (environmental, social and economic)?

16. What mechanisms does the implementation of quality use in order to meet with customers' needs precisely, making the development of products/services more dynamic and efficient (in terms of serving the consumer and reducing the impact on the environment and society)?

17. Does the company apply continuous improvement to constantly improve its performance in integrating sustainability with quality?