

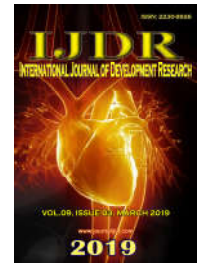


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## SUSTAINABILITY IN THE BRAZILIAN AERONAUTICAL CHAIN UNDER THE GLOBAL COMPACT

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### ABSTRACT

Sustainability has demanded from organizations that do not compromise the survival of future generations. UN proposed the global pact to mobilize governments and organizations to protect environment and society. It is imperative that operation planning has to be extended upstream and downstream to be understood as a supply chain, and therefore their strategies must be aligned. This work investigated whether sustainability is present in the strategies of the organizations that are part of the supply chain of the Brazilian aeronautical industry. The field research was carried out with seven metalworking companies that are part of the Brazilian aeronautical chain supplying parts directly to Embraer, a focal company that is a signatory of the UN Global Compact. The data collection was done by interviews with those in charge of the strategic administration of these organizations. Also, it was tried to establish in which stage of the sustainability the organizations are, using the methodology of Mirvis, Googins (2006). Based on the data, showed that the principles of sustainability provided by the Global Compact are not directly present in the strategies of the supply chain organizations and that these companies suggest that the chain is at an elementary stage of sustainability.

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### INTRODUCTION

Given the context of growing environmental degradation, it becomes fundamental that organizations understand sustainability as a strategic issue, intrinsically linked to their day to day basis. This approach does not admit to dealing with this issue only in business operations, since it is an issue that involves the maintenance of life, which is present in the daily life of our society (DIAS, MACIEL, SOARES, 2009). Shrivastava (1995a, p.955) apud (CARTER; ROGERS, 2008) describes sustainability as a potential opportunity to reduce the long-term risks associated with resource depletion, fluctuations in energy costs, product liability and pollution and waste management. According to LEAL (2009), the unsustainability of the business model of the last decades, post industrial revolution, is related to the customs of the society, exaggerated consumption, irrational exploitation of natural resources and disregard for social inequalities. As a result we have pollution, depletion of these resources, global warming and climate change. The Brundtland Commission, in 1987, introduced the concept of Sustainable Development or Sustainability.

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Where the environmental, social, technological, political, cultural and economic dimensions must act simultaneously. Business cannot thrive unless citizens and the planet are thriving sustainably. The 2030 Sustainable Development Agenda, with 17 ODS and 169 targets, is a plan of action focused on people, the planet and prosperity. Its goals are universal across borders and apply across the workplace, consumer market and surrounding community, in addition to being deeply interconnected. Organizations cannot thrive in a world of poverty, inequality, restlessness and environmental stress, and therefore in a vital interest in securing the delivery of Agenda 2030 (UNITED NATIONS GLOBAL COMPACT, 2018). The inclusion of the ODS objectives in the operations are real challenges for the companies since the pressure is increasing by actionable actions and that aim at a management attentive to the problems of scarcity. In this scenario, together with the globalization of the economy, common markets, trade agreements between countries, increasingly scarce natural resources, environmental disasters and increased environmental degradation, make the world today discuss sustainability in the three spheres of government, organizations and citizens. This has profoundly changed the way organizations and societies manage their resources, and how they have come to interact.

In the face of these challenges, former UN Secretary-General Kofi Annan set out to mobilize the international business community for the adoption of accepted values in the areas of human rights, labor relations, the environment and combat corruption, reflected in ten principles and entitled Global Compact (UN, 2018). To be sustainable, organizations seek to innovate their products and production processes, within their processes and in their supply chain, one of the solutions to remain competitive in the global market, reduce costs, use natural resources efficiently, be sustainable and to comply with international regulations and standards. Sustainability as an organization's strategy or sustainable business practices is based on the generation of value without degradation of environmental resources (SAVITZ, 2013). Investors have also realized this fact and are increasingly interested in directing funds to organizations that are leading the way to responsible businesses (GRI, COMPACT, 2017). Embraer, a signatory to the UN Global Compact, has invested in product innovation and business sustainability.

Within this context of globalization, intensification of competition, degradation of the environment, scarcity of natural resources, and being aeronautical transport harmful to the environment, with prospects of growth in the coming years and Embraer being a signatory of the UN Global Compact, it is important to study this supply chain as to its sustainability under the light of the Global Compact. Considering that aeronautical transport has a significant impact on the environment, contributing to global warming, waste generation, energy use, and how it has a growth perspective in the coming years, and considering that Brazil is the seat of Embraer that is a signatory of the Global Compact, it is important that this supply chain is studied in terms of sustainability, under the light of the Global Compact and with that, to analyze if the supply chain is sustainable. The general objective of this article is to analyze sustainability in the supply chain of the Brazilian aeronautical industry, in the metalmechanical segment, under the light of the UN Global Compact. For this, a bibliographic study was made on sustainability, the aeronautics chain and a research with interview in some companies of the section.

## Sustainability

The idea of sustainability can be understood if thought in a broad sense to the word "survival". The struggle for survival is in our history. In the beginning the Human Being facing the natural elements, like climate, and then society facing the consequences of our accelerated, inconsequent and unbridled exploration of the environment (ALMEIDA, 2002). According to Amir Djalali, the term sustainability appeared for the first time in a manual of forestry (a science that studies natural and artificial methods to regenerate forest stands) in the 1700's (DJALALI, 2009). The last three centuries have been marked by industrial and technological revolutions that have created new productive techniques. This productive change has greatly increased mankind's production capacity with accelerated economic growth and wealth generation, but has brought to the planet and society the concentration of wealth, social inequality, unemployment, environmental problems and there are issues of our own subsistence. As a result of these effects, studies, researches and currents of thought about the problem in question to analyze and propose alternatives to this model of development and new forms of interaction of the society with the environment appeared (OLIVEIRA, MEDEIROS, *et al.*,

2012). Scientists like Dennis and Donella Meadows, authors of the 1972 Limits of Growth report, argued that accelerated economic growth would cause problems in the natural foundations of life. This study, sponsored by the Rome club, predicted that maintaining the levels of consumption and economic growth of countries, the limits of nature and natural resources would be reached within a hundred years (ALMEIDA, 2002). The term "Sustainability" was officially presented in 1987 at the United Nations World Commission on Environment and Development (CMMAD) and was chaired by former Prime Minister of Norway, Gro Harlem Brundtland. Defined as "[...] the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs" (NATIONS, 1987) (OLIVEIRA, MEDEIROS, *et al.*, 2012). Later on January 31st, 1999, at the World Economic Forum, Davos Forum, former Secretary of the United Nations, Kofi Annan announced the initiative for a Global Compact and was officially launched on 26 July 2000 at the UN office in New York. And is an initiative aimed at mobilizing world organizations to adopt world-wide accepted values in the areas of human rights, labor relations, environment and anti-corruption, described in ten principles (UNGLOALCOMPACT, 2017).

With this measure, it aimed to challenge corporate leaders to enact a pact to protect the environment. His argument was that the globalization of markets in the present form was unsustainable and therefore urged organizations to put into their business practices the ten principles of it (SETHI and SCHEPERS, 2014). Its participants commit to putting their business strategies in agreement or in accordance with the principles of the same. Corporations are also expected to partner with civil society in pursuit of UN goals. Whoever joins the Global Compact initiative assumes the responsibility of contributing to the achievement of ODS. As the UN's main channel with the private sector, the Global Compact has the mission of engaging companies in this new development agenda composed of 17 ODS (UNGLOALCOMPACT, 2018). Organizations play a prominent role and should contribute to corporate strategies that incorporate ODS compliance in November 2015, the United Nations Global Compact, the World Business Council for Sustainable Development and the Global Reporting Initiative (GRI), draw up a guide of sustainable organizations, called the SDG Compass Guide, translated into the ODS Guide for Organizations, presenting the five key characteristics that define business sustainability (ONUBRASIL, 2018).

For Porter and KRAMER (2006), sustainable practices enrich reputation, enhance a company's image, strengthen its brand and even increase the value of its actions. For this, organizations create reports that demonstrate their practices and actions toward sustainability. However, often the practices do not stand out beyond the very legal requirement of the sector of an organization's performance as a differentiating practice. In order for the company to become sustainable, sustainability must become part of the strategy. "Your sustainability action needs to be at the core of the company - being bold, not pushy, is not a device for employees to 'feel good once a year.'" (Werbach, 2010, p.67). Organizations that do not have this capacity will have difficulties to stay in the market (ESTY *et al.*, 2006). Thus, sustainable organizations can be defined as those based on managerial practices and premises in order to meet the criteria of being economically viable, remaining competitive in the market, giving priority to

the concepts of Ethics, Social Responsibility, Transparency and of Corporate Governance. These organizations must also produce in a way that does not harm the environment and contribute to the social development of the region and the country in which they operate. To this end, they carry out actions that promote the increase of the quality of life and well-being of all its stakeholders interested in its activities, products and services. It is worth mentioning that this definition applies to organizations from the most different sectors (public or private), regardless of their size and area of operation (LEAL, 2009).

**The Aeronautical Industry:** The International Air Transport Association says China will become the world's largest passenger market by approximately 2024, ahead of the United States. To account for the large number of passengers in the airspace, two major large-scale civil aircraft manufacturers (Boeing and Airbus) launched executive jet aircraft. Boeing predicts that over the next 20 years, China will require 6810 passenger aircraft, valued at more than \$ 1 trillion, thus making it the largest business in the world in this market. In addition, Boeing predicts that airlines in general will need 36,770 aircraft worth \$ 5.2 trillion over the next 20 years (LIN; HUNG; HU, 2018). By 2017, the Aerospace and Defense sector posted record profits of \$ 77 billion, an increase of 18 percent over the previous year, surpassing the previous record in 2014. The top 100 A & D companies, by revenue, \$ 728 billion in revenue an increase of 4% over 2016. Operating margin also set a record in the industry of 10.6%. Aircraft demand is strong in most regions of the world, but especially in fast-growing countries such as China, India, and Brazil.

These large and flourishing middle-class countries offer significant aircraft manufacturers and domestic and international aircraft (PWC, 2018) opportunities. According to the Airbus report (2017) passenger revenue in 2016 was \$ 7.0 trillion and is expected to reach 16.5 trillion in 2036, an increase of 3.1% over the last report. Overall air traffic is expected to double every 15 years and air traffic with Airbus aircraft is growing at a rate of 4.4%. In parallel, 34900 new deliveries are forecast by 2036. This segment has as a characteristic a high degree of technological integration, strong industrial correlation and high added value, being also a comprehensive and innovative industry of intensive technology, capable of promoting and strengthening the competitiveness of traditional industries. Due to stringent quality requirements, new entrants face a major challenge in entering the industry and a long return period. In the context of globalization, global manufacturers attach great importance to supplier partnerships. They integrate successively supply chains to reduce costs efficiently. When evaluating and selecting suppliers, manufacturers generally use the four criteria specified by Donald and O'Shaughnessy, including price, quality, delivery, and service (LIN; HUNG; HU, 2018). In Brazil, the aerospace industry develops and manufactures commercial, military, light and medium-sized aircraft, helicopters, gliders, sounding and launching rockets, satellites, defense equipment and systems, missiles, radars, traffic control systems aerial and flight protection, satellite ground systems, avionics and spaceborne avionics equipment. In addition, it provides repairs and maintenance on aircraft and aeronautical engines. Most of these industries, companies and organizations, is located in the municipality of São José dos Campos, State of São Paulo (CECOMPI, 2007).

**Aeronautical Supply Chain:** Supply Chain Management (SCM) as a concept has evolved over a period of time being used since World War II. Different researchers have attempted to explain SCM in different contexts. In one of the older surveys, Ellram & Cooper (1993) defined SCM as a comprehensive management philosophy designed to control the entire flow of the distribution channel from suppliers to end customers. It is a management technique for integrating different business activities between companies. It is also important to include coordination and collaboration with channel partners, who may be suppliers, intermediaries, outsourced service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies (STOCK; BOYER; HARMON, 2010) (MAHINDROO; SAMALIA; GOYAL, 2012).

It can also be defined as all the efforts involved in producing and delivering an end product from the vendor supplier to the customer's client (MACHLINE, 2011). Supply chain management (CSM) has become a key and strategic factor for increasing organizational efficiency and consequently improving organizational metrics and goals, as well as improving organizational competitiveness, better customer service and increased profitability (GUNASEKARAN *et al.*, 2001, p 71).

For organizations to achieve this goal, it is necessary to structure themselves in a coordinated way and to create an inner organization network, with its participants aligned with common objectives, which will result in the survival of the business. Therefore, companies in the contemporary world are not under individualized competition, but between sets of organizations that form supply chains. The viability of an organization depends on how it is able to respond to requests from the consumer market and at the same time remain lean. Organizations began to understand the benefits and importance of a strategy for cooperation between buyers and sellers in the same supply chain (GUNASEKARAN *et al.*, 2001, p.75). In a highly competitive industry such as aeronautics, with high technology products, global consumer market and intensive use of natural resources, chain management is paramount in the search for better results. According to Penfield (2018), the future of supply chain management is sustainability. Companies are under pressure to improve social and environmental standards wherever they can exert their influence, for example, on their suppliers and along the chain. LIMA *et al.* (2005) confers four main factors to the aeronautical supply chain as a strategy for the country's economic development as follows:

First, its direct relationship with aspects of national security, given that civilian industry influences and is influenced by military technological development and production programs. Secondly, it is a set of productive activities that, because they are classified as Pavitt (1984) as being of high technological intensity, accelerate technical progress in other related activities. That is, they promote technological dissemination (spillovers), contributing to accelerate the long-term economic growth rate. The integration of manufacturing plants and teaching and research institutions in the sector is characterized by the use and development of engineering techniques of high technological level that, in general, present positive developments for other sectors of the economy. Thirdly, although the pace of increase in external sales is subject to cyclical fluctuations in the world economy, a significant share

of the products that make up the chain has high income elasticity of demand in the long run, with exports classified as very dynamic in global terms IEDI (2001). Civil aircraft manufacturers often stand out among the country's largest exporter lists, making the sector stand out in the performance of national economies. Fourth, a BNDES study showed that the "aircraft construction, assembly and repair" segment had the highest average productivity growth rate between 1996 and 2001 (around 20.35% per year, at constant prices). In addition, this segment was one of the few with a high correlation between domestic (high labor productivity) and international performance, as average trade surpluses were around US \$ 1.4 billion in the same period (CAFÉ *et al.* 2004). Therefore, this industry promotes technological dissemination, helping to accelerate the rate of long-term economic growth. As seen in the Brazilian case, the integration of manufacturing plants and teaching and research institutions in the sector is characterized by the use and development of engineering techniques of high technological level that, in general, present positive developments for other sectors of the economy (LIMA, PINTO, *et al.*, 2005). In Brazil, the pioneers of aeronautics followed this line of thought, within a tripod formed by teaching, technological research and industry, culminating in the creation of the ITA, in 1950 with a presidential decree (FORJAZ, 2004). Some of the companies that make up the Brazilian aeronautical industry are part of a local productive arrangement or cluster, made up of 94 companies from the aerospace and defense chains. The anchor company is Embraer. There are 23 thousand jobs and annual revenues of US \$ 7 billion. More than half of the companies (55%) are predominantly industrial and mostly machining, systems and composite materials (PQTEC, 2018). Thus ends the chapter on the aeronautical chain and presents the methodology of the work and final conclusions.

## MATERIALS AND METHODS

This work is characterized as an applied nature, since from the study of techniques and practices of sustainability can be applied in companies of the aeronautical segment. According to Souza *et al.* (2013), an applied research aims to generate knowledge for practical application, which is one of its objectives. As for the objectives, it is exploratory according to RAMPAZZO (2005), the study is part of an unstructured observation, collect data and record. The work was done analyzing data, collected through an interview with the support of a questionnaire, and registered for later analysis, seeking to analyze sustainability, sustainable practices in the industry and the Brazilian aeronautical chain, from the perspective of the Global Compact. Also according to GERHARDT and SILVEIRA (2009), it is exploratory when it has a bibliographical survey and interviews. As far as the procedures are concerned, a survey search seeks to explain the problem from published bibliographical references (GERHARDT and SILVEIRA, 2009). Therefore, this work also uses the bibliographic research procedure, since all research requires research on published literature (books, articles, theses, dissertations) to raise the state of art in sustainability and also make use of the survey in the companies that make up the aeronautical chain. To make possible the data collection, a project was presented to the Research Ethics Committee of PUC University of Campinas-SP, detailing the research objectives and the involvement of the interviewees, which was approved. The population determined for the interviews were companies of the metal-mechanic segment belonging to the

Brazilian aeronautical supply chain, and for the sample, seven companies with national capital were selected, direct suppliers of the Embraer Company; be part of the Brazilian aeronautical supply chain; with headquarters in the State of São Paulo; within this supply chain, suppliers of machining of metal parts, for Embraer; have a staff of 50 to 499 employees; be a company with national capital of 90% or more; invoicing for Embraer represents more than 30% of total company revenues; whose total revenue is above R \$ 2.4 million and up to R \$ 90 million per year, based on the billing for the year 2017. It will be a sample for convenience, not calculated by statistical methods. An interview script was applied to one of the managers with trust positions of these companies, being able to be a manager or director of the same, through an interview, with an approximate duration of 20 minutes. The interview is based on a formatted script and was recorded for later analysis. The names of the companies and the interviewees were identified by codes to maintain the confidentiality of the source. So each organization received the code from 'company1' onwards. Based on the data, we sought to classify at what stage of the evolution of sustainability organizations meet. For this, the methodology of Mirvis, Googins (2006) was used according to which the corporations evolve to higher stages based on four triggers: the credibility and the capacity to support the activities of citizenship, the coherence of these activities and the commitment of incorporate citizenship into corporate culture.

**Mirvis and Googins identified five stages of corporate citizenship:** elementary, committed, innovative, integrated and transforming, representing "distinct patterns of activity at different points of development." Stages are measured in seven dimensions: definition, purpose, support to leadership, structure, management of issues, relationship with stakeholders and transparency, being:

**Elementary:** Also known as the compliance stage, citizenship activities at the elementary stage are undefined because there is insufficient corporate awareness and scarce senior management. Involvement. Small businesses, for example, generally comply with applicable health, safety, and environmental laws, but do not have the time or resources to engage in other community and employee development activities.

**Triggered:** At the engaged stage, policies are developed for employees and managers to engage in activities that go beyond rudimentary compliance. Senior management becomes more actively involved in the development of corporate policies and task management at all levels to act on higher standards of corporate citizenship.

**Innovative:** Corporate citizenship policies are more comprehensive in the innovation phase. Innovation and learning are achieved through increased consultation of stakeholders and participation in forums and conferences. Corporate citizenship programs are funded and launched, generally at the functional level and with the support of senior management. There is some measure of transparency as companies monitor community engagement and issue public reports.

**Integrated:** Corporations incorporate and formalize citizenship activities in the integrated stage. By monitoring performance through indicators and indicators, corporations "drive

citizenship in their lines of business," according to Googins and Mirvis. Public company boards of directors may be involved in monitoring performance by establishing special corporate board committees at the board level. Other formal efforts to integrate citizenship activities include stakeholder consultations and formal training.

**Transforming:** Companies in the transformation stage realized that corporate citizenship makes strategic sense in developing new markets and increasing sales. Mirvis and Googins cite the integrated economic and social strategy of ice cream maker Ben & Jerry, which attracts environmentally conscious consumers. Multinational corporations strive to become better global citizens at the stage of transformation. For example, pharmaceutical companies like Merck and Novartis donate or offer discount drugs to developing nations, and technology companies such as Intel and Hewlett-Packard invest in social and educational projects in developing countries where they operate (MIRVIS, GOOGINS, 2006).

**Analysis of the data:** According to Mirvis' criteria, Googins (2006) concludes that most are in the elementary stage of adherence to the Global Compact. However, for forty-three percent, they are in the trigger stage, where there are policies developed for employees and managers to participate in activities. Considering the stages in which companies are found, there are factors that hinder greater engagement of practices, one of the factors being the cost of implementing such practices and problems of a higher order, such as negotiation of taxes, debts, others. Regarding some sustainable practices, the most applied are reverse logistics and transport sharing. Reverse logistics in the supply chain occurs on behalf of the Customer, where it sends the raw material to the suppliers and withdraws the finished products, using the same transport. On the other hand, logistics sharing takes place among suppliers, where there is shared transport costs that collect the semi-finished materials up to the surface handler or thermal handler. A car or truck, on pre-determined days of the week, collects the semi-finished materials at the companies in the region, and transport to the handler. And, it also removes already treated parts from the handler and returns them to the suppliers to finalize later. With regard to the Global Compact and ODS, most respondents are unfamiliar with the topic.

**Table 1. Meeting the 10 Principles of the Global Compact**

10 Principles of the UN Global Compact		
Human Rights	1- Businesses should support and respect the protection of internationally proclaimed human rights; and	100%
	2. Make sure that they are not complicit in human rights abuses.	100%
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	100%
	4. The elimination of all forms of forced and compulsory labour;	100%
	5. The effective abolition of child labour; and	100%
	6. The elimination of discrimination in respect of employment and occupation	100%
Environment	7. Businesses should support a precautionary approach to environmental challenges;	57%
	8. Undertake initiatives to promote greater environmental responsibility; and	100%
	9. Encourage the development and diffusion of environmentally friendly technologies.	57%
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	100%

Source: Prepared by the author.

**Table 2. Relationship between Sustainable practices, Global Compact principles and ODS**

Main sustainable practices	Principles of the Global Compact	ODS
LED light	Principio 7	2/6/7/9/11/12/13/14/15/
Rainwater Reuse	Principio 7	2/6/7/9/11/12/13/14/15/
Reverse logistic.	Principio 8	2/6/7/9/11/12/13/14/15/
Logistics Sharing	Principio 8	2/6/7/9/11/12/13/14/15/
Water treatment station.	Principio 7	2/6/7/9/11/12/13/14/15/
Recycling.	Principio 7	2/6/7/9/11/12/13/14/15/
Returnable Packaging.	Principio 8	2/6/7/9/11/12/13/14/15/
Harnessing Solar Light.	Principio 7	2/6/7/9/11/12/13/14/15/
Reduced paper usage.	Principio 9	2/6/7/9/11/12/13/14/15/

Source: Prepared by the author

Regarding the behavior and sustainable vision of companies, even if they are not explicitly described, since they are part of Embraer's supply chain, the principles are part of Embraer's strategy and guidelines, since to be an Embraer supplier, principles are required in the code of ethics and conduct, and the percentage of companies that comply with the principles are almost all, according to Table 1. With respect to the practices themselves, they can be related to the following principles and ODS, according to Table 2. Based on the interviews and data analysis, the final considerations are obtained by means of this work.

### Final Considerations

The present work focused on the general objective of the research in analyzing the sustainability of the Brazilian aeronautical chain, mechanical metal segment, under the light of the Global Compact. A review of the literature was also made to understand sustainability, its evolution and concepts, the supply chains and the Brazilian aeronautical industry. It is important to emphasize that because this is a research based on a sample, the results may not accurately represent the entire Brazilian aerospace chain, and for a more accurate result the study should be expanded. However, by analyzing the data, it is possible to identify an existing context. The study shows that sustainability and the environment must be part of the organizations, due to the need to reduce the impact on the environment, the increase in raw material costs, environmental legislation, civil society pressure, pressure from governments to regulate world trade with organizations and products that are not harmful to the environment, and also for a quest for better productive efficiency and cost reduction. FIESP itself has published a sustainability guide and says it is a key factor for business continuity.

As Embraer is a global positioning industry with shares traded on the stock exchange, which is part of the sustainability index, its sustainable practices and actions provide a valuation of the shares and their business and consequently their market value. It is also interesting from the financial point of view that the organization maintains and encourages the use of sustainable practices, so that it is recognized as sustainable, which means that its actions are valued by providing a return on the larger capital. Based on this strategy, to reinforce its brand and its action on sustainability, Embraer signed the global pact in 2008, committing itself to its principles. On the consumer side of its products, in the vast majority of airlines, this is increasingly looking for more efficient, less polluting products. They are more efficient because they mean lower costs in maintenance or in the price of the product itself, and less polluting because these companies are also subject to



government regulation. More efficient products also bring more satisfied consumers. In addition, a company is only sustainable if its supply chain also seeks sustainability through respect for the environment, society and use of sustainable practices. The success of an organization is also related to a sustainable supply chain that incorporates sustainable practices and values into society within strategic strategies. In the national aeronautical supply chain, 55% are industry and the majority is of the metal mechanic segment, composed mostly by small and medium-sized enterprises, family, and national capital. Through the analysis of the interviews, it is observed that companies, despite not knowing the principles of the Global Compact, their actions, principles and sustainable practices are in line with the principles of the same. The theoretical knowledge of the Global Compact is minimal and the sustainable practices adopted in general seek to reduce costs and were implemented to comply with environmental legislation and reduce costs. However, they do not contradict the principles of the Pact and the fact that the objective has been, in general, and mainly the reduction of costs, it also complies with the Global Compact.

That is, they know little about the Global Compact, but they follow the principles of it, with unintentional actions. It is worrying that they are not aware of the Pact and the ODS, since both have the objective of mobilizing organizations to adopt fundamental values of society and is a pact to protect the environment. The UN expects large organizations to put business strategies in line with the pact and that goes through the supply chain. Those who integrate the Pact assume a commitment and responsibility to contribute to it. Since the main customer of the chain integrates, and success goes through the supply chain, it is natural to note that the chain will be charged on the chain. Considering the methodology developed by Mirvis, Googins (2006), companies in general are in an elementary phase of sustainability, also known as the compliance stage, where citizenship activities at the elementary stage are undefined because there is insufficient corporate awareness and scarce senior management. Organizations need to evolve from one stage to the next, incorporating the strategic vision of sustainability as a business principle at all stages of production and at all hierarchical levels, down to the factory floor and sub-suppliers. Sustainability and sustainable practices must be at all operational levels and practices must be adopted to preserve the environment, integrate with society and obtain better financial results, taking into account the sustainability tripod. For this, knowing the Global Compact and ODS objectives is fundamental, since the main client, is part of the same. At this point, it is suggested that CLUSTER adopt training and explanatory procedures for participating companies, with lectures, manuals, and constant dissemination on the website and electronic media. Another suggestion is that companies have in their policies of environment, ethics, conduct, mention of the Global Compact and its principles. It is important to make clear in your policies the commitment to it. For this, a review on the policies and later disclosure on their websites, social media and internally throughout the organization is advisable.

Additionally, it is seen that sustainability is backed by a tripod, formed by economic, environment and society. It was not the object of this work to analyze the chain on the tripod of sustainability. But there is scope for future research in this area. By the analysis of the data, the companies show certain

economic difficulty, which can compromise the sustainability on the economic question, making the others unfeasible.

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