



ORGANIZATIONAL STRATEGIC PLANNING: REFLECTIONS FROM THE USE OF THE SWOT AND GUT MATRICES IN AN ASSOCIATION OF COLLECTORS OF RECYCLABLE MATERIALS

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ABSTRACT

The objective of this work was to apply the SWOT and GUT matrices to the Association of Recyclable Materials of the Municipality of João Monlevade-MG to analyze its current situation and establish priorities in relation to the main problems raised, in order to serve as inputs for the construction of a strategic planning. In order to do so, the SWOT and GUT matrices were used, as these tools promote the diagnosis of the organizational environment, prioritizing some strategic actions that increase the possibility of success of the organization, both now and in the future. As for methodological procedures, the study is based on bibliographical and documentary research, action research, follow-up of daily activities of the association, participation in internal and external meetings of members and/or partners of the organization, dialogue with the collectors, monitoring, and analysis of the selective collection program implemented. It is observed that the application of the SWOT and GUT matrices contributes to the recognition of characteristics that impair sustainability, productivity, customer loyalty, competitive advantage, among others, as important as the outstanding ones. The result of the research presents factors that have helped to build new phases and actions of short, medium and/or long term in the association, in order to try to guarantee success and sustainability.

Keywords: Association of Waste Pickers; SWOT and GUT Matrices; Strategic Planning; Sustainability.



1. INTRODUCTION

One of the main problems of the waste, with emphasis on the post-consumption, is related to the geographic dispersion associated to the low transportability, requiring collections in small quantities and of several types of materials. The greater the dispersion, the greater the complexity of reverse logistics and the higher transport costs. In this context, Law 12,305/2010, which established the *Política Nacional de Resíduos Sólidos* (PNRS - National Solid Waste Policy), provides for the participation of collectors organized in associations and/or cooperatives as facilitators of the collection, storage and transportation of waste.

As these associations do not fall into the public or the private sector, they are known as non-governmental organizations and are therefore included in the so-called third sector. In general, they are organized in the form of cooperatives or popular and solidarity associations, made up of people who are marginalized in society, such as recyclers. These individuals seek to achieve common goals through cooperation, to improve life quality and participate in the local and regional development in which they are inserted, thus reducing the production of waste and generating income.

Since 2001, the city of João Monlevade, in the State of Minas Gerais, has had the services of an association of collectors of recyclable materials, which, in this research, we will call "ACJM" (*associação de catadores de materiais recicláveis*), which attends the main avenues of the city and its 64 neighborhoods. This association works with the collection, sorting and commercialization of recyclable materials and is currently made up of 26 waste pickers.

The selective collection is carried out through temporary partnership contracts, which may be renewed or not according to the performance in the execution and proper insertion of the collection between the "ACJM" and the City Hall. If performance is below expectations, the execution of this service may be transferred to some outsourced company that will be hired by the city and, consequently, compromise the survival of the association.

In order for this association to operate with a competitive structure, contribute to the preservation of the environment and increase/maintain work and income in the city, it becomes necessary to develop strategies of survival and competitiveness, based on strategic planning. This instrument contributes to the elaboration and execution of objectives that, generally, considers factors external and internal to the organization, therefore, it is able to show alternatives that the association must consider in order to try to guarantee the continuity and sustainability of its actions. This enables the implementation of strategies at various levels, regardless of whether the organization is the first, second or third sector.

However, it can be seen that the "ACJM" does not have any instruments aimed at planning its actions. The studies of Magalhães et al. (2016) have shown that there are decisions about more immediate actions, but they are transmitted through imprecise verbal communications and without any level of detail. In fact, since leadership is very close to other members, decisions are linked to intuitive issues of strategy. The lack of conditions to verify the strategic position of the association in the operating environment and the analysis of its priority problems makes decisions occur more reactively to changes inside and outside the environment than preventive and/or proactive. This makes it impossible to construct a strategic plan and may have negative consequences for the association if it cannot solve the problems by reactive measures.

As economic solidarity enterprises cannot implement at any level, actions created by and/or for traditional companies without a joint reflection of the participants, the following question should be asked: How to implement tools capable of analyzing the strategies of the "ACJM", based on its situation in the environment in which it operates, as well as to establish priorities in relation to the main problems presented by it, in order to contribute to the construction of a Participatory Strategic Planning?

The literature related to the methodologies of proper application of strategic planning as well as its importance in social and solidarity enterprises is needy. However, there are tools that can be used to gather information necessary to carry out a strategic analysis and that can be applied to the "ACJM", respecting its specificities, such as the SWOT matrix, **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats - and the GUT matrix - Gravity, Urgency and Trend.

It is believed that the application of both tools in the "ACJM" could form a framework of information necessary for the construction of a more appropriate strategic planning, since, while the SWOT matrix contributes to verify the strategic position and the situation of the enterprise in the environment (Wright et al., 2011; McCreddie, 2008), the GUT matrix analyzes the priority problems, by means of gravity and urgency, based on measures or subjectivity (Lucinda, 2010).

The aim of this study is to apply the SWOT and GUT matrices in the Association of Recyclable Materials of the Municipality of João Monlevade-MG to analyze their current situation and establish priorities in relation to the main problems raised, in order to serve as inputs for the construction of a strategic planning. More specifically, this study aimed to: a) Raise the "strengths, weaknesses, opportunities and threats" of the "ACJM" together with the associates in order to raise the main problems; b) Analyze the problems detected by the SWOT analysis, taking into account the severity, ur-



gency and trend, according to the methodology of the GUT matrix; and c) Carry out a strategic analysis of this association in order to give more sustainability to its actions.

2. THEORETICAL REFERENCE

Associations and Cooperatives

Social management has been developed by several sectors, especially the third sector, which is “located at the intersection between the State, the market, and society” (Peres Jr. et Pereira, 2014, p.231) and can be represented by several types of non-profit and non-governmental organizations, such as associations and cooperatives.

Associativism presents requirements for a more democratic society: “to defend the demands of the most vulnerable and excluded groups (...), to promote civic virtues, trust, cooperation and public spirit, (...) for denouncing the relations of power (...), enriching the bases of participation and political representation” (Lüchmann, 2014, p. 162).

Following the principles of associativism, associations are legal entities formed by the union of individuals who organize themselves to carry out representative activities; however, there are exceptions, when, due to issues provided by law, they can market; yet, their objective is economic, not focused on profit as, for example, associations of collectors. In these institutions, the preponderant factor is the people who compose them, of private law, not public (Cardoso, 2014; Alves, 2012).

The associations form the basis of the main concepts that support alternative or renewing perspectives of democracy, either because they perform cooperative functions with governments, since they expand spaces of political representation and/or challenge cultural and institutional patterns (Almeida et al., 2012, p. 239).

The authors further emphasize that associations help promote individuals with a greater sense of citizenship, with the capacity to develop civic virtues, denounce injustices, reflect on the relations and patterns of power, and social movements are the main subjects, besides often working with peripheral groups, and developing leadership and new values that are more solidary (Almeida et al., 2012; Diani et Bison, 2010; Fung, 2003, Warren, 2001),

There are currently several types of associations distributed across multiple industries. In Brazil, Law No. 10,406 of 2002, which establishes the Civil Code, sets forth the rules for the formation and formalization of associations. Together

with associations, there are cooperatives, which are the union of workers or professionals from different segments that become associated by their own decision. Entry into these groups is free as long as their individual interests in terms of producing, selling or providing some service are not incompatible with the general objectives of the cooperative (Cruzio, 2005).

Cooperatives are based on the cooperative system, which “aims to transform the social factor into the economic one using cooperation, as a form of social integration, and can be understood as a joint action in which people formally or informally unite to achieve the same goal” (Ribeiro, 2012, p. 20). Law No. 5,764 of 1971 is responsible for defining the national cooperative policy and establishing the legal regime of cooperative societies. While associations are institutions that have the objective of representing a group and/or their interests, cooperatives have an economic purpose, their main interest is to enable the productive business of their members to the market (Cardoso, 2014).

There are also the so-called popular and solidarity associations and cooperatives, which are enterprises composed of individuals who seek to achieve common goals through cooperation; improve the quality of life and participate in the local and regional development in which they are inserted (Magalhães et al., 2016).

The diversity is striking in the organizational forms of solidarity economy enterprises in Brazil, especially in the last ten years. The phenomenon is identified by terms such as solidarity economy, solidarity socioeconomics, popular and solidarity economy, economy of the popular sectors, economy of communion, social economy, and popular cooperativism, among others. They appear in the form of income generation groups, popular canteens, production and marketing cooperatives, self-managed companies, exchange networks and clubs, fair trade and finance systems, ecological production groups, women’s associations, etc. (Matarazzo et Boeira, p. 211, 2016).

Among the values of associativism and cooperativism, there are the principles of integration, solidarity and democracy, aiming at an emancipated and socially integrated society. These popular groups that rely on these philosophies seek to develop the potentiality of individuals in a particular community. And, on the economic side, they also seek “the satisfaction of the material and symbolic needs of men and women; the relation of nature, science and technology; and the processing capacity that has the workforce, creating an articulated balance between all the elements” (Reyes, 2011, p.709).



The Recyclable Material Collectors and the National Solid Waste Plan

The collector of recyclable material survives by extinguishing the conception of what is useless, adding value to matter, making it reusable, renewable and recyclable, under the feeling of being “autonomous proletarians” as they work hard and “sell” this service to large recycling industries (Medeiros *et Macêdo*, 2007).

Waste pickers are responsible for collecting, selling, selecting and preparing the recyclable material, as well as maintaining the environment and work equipment, publicizing the recycling work and administering the work (MTE, 2017).

According to estimates by the National Movement of Recyclable Material Collectors (MNCR, 2014), the number of 800,000 workers in Brazil is indicated and “most of the groups are still informal (40.3%), followed by the type of association (31.3%) and cooperative (28,3%)” (Silva, 2017, p. 34). In this context, in general, the selective collection programs are an alternative and possibility to preserve not only the environment, but also the people in a sustainable way, inserting them in these enterprises (Ribeiro *et Besen*, 2006).

In Brazil, various associations and cooperatives are made up of collectors, who see these forms of organization not only as a possibility of income generation, but also as an alternative to rescue individual autonomy. This is expressed in a more active involvement of production, which was succeeded by the typical alienation of the traditional industrialist model, in which the worker represses himself to a simple piece of a certain stage of the productive process (Pinheiro *et Francischetto*, 2016).

Considering all the difficulties that exist, the scavengers resist and fight for life and their space in society, counting on the support of national movements, non-governmental organizations (NGOs), government and the population, which has become aware of what is related to selective collection, including the class of scavengers (Bringhenti *et Günther*, 2011).

In Brazil, the recyclers of recycled materials associations were highlighted by Law 12.305/2010, which establishes the National Policy on Solid Waste. Although the Brazilian Federal Constitution of 1988 assigns to the municipal public authority the responsibility to ensure urban cleanliness and the collection and final destination of the waste, with the PNRS, this power is now obliged to carry out plans for the municipal waste management, involving local government, business and the general population (Brasil, 2010).

As the nature of the generated waste is related to the geographic dispersion associated to the low transportability,

the viability of this reverse logistics process had to incorporate the cooperatives or associations of collectors. Article 36 of Law 12,305/2010 determined the creation of selective collection services. This allowed the public authority to hire collectors to carry out the selective collection, as long as they have the infrastructure to do so (Brasil, 2010). This model allows the associations of collectors to have another income beyond that generated by the commercialization of the recyclable material (Arantes *et Borges*, 2013).

Authors such as Demajorovic *et al.* (2016), Fonseca *et al.* (2015), Demajorovic *et Migliano* (2013), Yoshida (2012), Guarnieri (2011), among others, highlight some innovative features of Law 12,305/2010, especially regarding shared responsibility over the product life cycle, sectoral agreements, promotion of cleaner production and the concept of eco-efficiency. It also reinforces the inclusion of organized collectors in the collection and destination of recyclable materials as agents of reverse logistics.

The law also innovates by recognizing groups of recyclable waste pickers as a key player in the recycling chain and encourages their insertion into the various initiatives for expanding the collection and disposal of waste. It is important to remember, as shown by Ribeiro *et al.* (2009), that the largest part of the waste that returns to recycling activities in Brazil, goes back to the work of recyclable waste pickers, who, however, live from a process of work exposed to great social vulnerability (Demajorovic *et al.* 2016, p.124).

However, it is important to emphasize that in order for cooperatives or popular associations to remain in the process, they need to be structured within a minimum of organization, with sufficient management tools to develop their strategies for survival and competitiveness. Within this process, Strategic Planning has relevant weight.

Strategic planning

Capitalism potentiates competition among organizations and an alternative used by these is the adoption of strategies to ensure their survival in the market. According to Ansoff *et McDonnell* (1993), strategy is the set of decision rules that dictate the behavior of the organization. For Luecke (2009), strategy is a method used by the organization to achieve competitive advantage over its competitors through differentiation.

Organizations should plan the use of these strategies and predict a future state in which they can be applied. In this way, the decision-making process will be faster, more coherent, efficient and effective. In addition, the use of planning



as routine increases the chances of success of the enterprise and reduces uncertainty (Oliveira, 2010). The author reinforces that strategic planning is an administrative process that allows the company to achieve a better targeting, seeking to maximize the knowledge of its external environment and to act in an innovative and diversified way.

Ansoff et McDonnell (1993) point out that the concept of strategic planning arises from the moment that the planning defines which strategies will be followed, involving the highest hierarchical levels and considering the long-term inertia. For the author, strategic planning does not determine that the future is necessarily a projection of the recent past. What is done is an analysis of the perspectives of the organization, seeking to find unique tendencies, threats, opportunities and discontinuities that can cause these projections of the past to undergo changes.

There are several currents and theories developed regarding strategic planning, as can be seen in a simplified way in table 1.

As discussed by some researchers and/or thinkers such as Costa Filho (2010), Stiffler (2000), Friedmann (1987), Matus (1984), traditional planning was based on issues related to social reform, since some social reformers such as Weber called attention to the consequences of actions and the analysis of their costs and benefits. After World War II,

a more generic model of strategic planning was created for democratic capitalist countries based on the social and economic sciences.

With regard to strategic situation planning (PES - *Planejamento Estratégico Situacional*), it basically has three characteristics. Firstly, in PES the planning is done from the problems and not from the objectives, as in traditional methods of planning, trying to understand, from the perspective of those involved, their reality problem, as causes, consequences, among others, to prepare an action plan. The second is subjectivity, subjectively approaching reality from the perceptions of the agents involved with the situation, recognizing that each person has their own characteristics and automatically interpretations will depend on their knowledge, values and experiences. And the third distinguishes that the future is uncertain, not predicting, but rather trying to create it from the possibilities that those involved can dazzle (Rieg *et al*, 2014).

Strategic foresight argues that the complexity of reality requires a plan that uses both rigorous and participatory methods, seeking to reduce inconsistencies, standardization of languages, among others, respecting freedom of choice (Godet, 2004).

Foresight is a systematic process that examines “the long-term future of science, technology, economics and society

Table 1. Some chains of strategic planning

Adapted from Authors	Types of Planning	Summary description
Giovanella, 1991; Rive-ra, 1992	Traditional	One of its characteristics is the hegemony of the economic dimension, evidenced in the understanding of planning as a technique that aims to rationalize and optimize the application of resources, defining its objectives and means to reach it in function of economic cost/benefit.
Rivera, 1992; Huertas, 1995	Situational	It proposes that public planning is not the privilege of a dominant social force and controlling circumstantial of the State, understanding that the actor who plans is within the reality and coexists with other social actors. It proposes the substitution of the sequential stages, present in the traditional models, for four moments, dynamic, non-exclusive, never ending and that must be reformulated throughout the life process of the plan.
Godet e Durance, 2007; Godet 1994	Prospective	First generation foresight was based on mathematical formalization, probability, and operational research, based on methods developed by US experts, which would be instrumental that included techniques such as structural analysis, cross-impact matrix, and multicriteria analysis.
Coates, 1985	Foresight	It can be understood as a process through which one seeks to arrive at an understanding of the forces that shape the long-term future, and which must be considered in policy formulation, planning and decision-making;
Friedmann (1992)	Non-Euclidean	Non-Euclidean planning is political by nature; it assumes that knowledge and action are united; is oriented to the present and is mainly concerned with the institutional and procedural changes of each theme. It has the participation of the social segments, with the objective of building a consensus among the various actors, demanding a great negotiation, mediation and commitment. In this model, it is necessary that planners proceed cautiously and experimentally to learning with errors, allowing a feedback of the information.

Source: Created from Rieg *et al*. (2014); Silveira *et al*. (2013, p. 605-610).



in order to identify areas and emerging technologies that are likely to generate the greatest economic and social benefits” (Maclean et al., 1998 *apud* Silveira et al., 2013, p. 608-609).

And non-Euclidean planning is public, aimed at social change in order to integrate the poorest sectors of society, based on the political, economic and social dimensions, seeking to change social relations in order to provide development based on equity and sustainability (Friedmann, 1992).

SWOT Analysis and GUT Matrix

There are several tools that can help in the elaboration of a strategic planning; however, analyzing the environment in which the organization is inserted becomes fundamental for perception of the reality aiming at its sustainability (Araújo et Pinto, 2015).

Among the various tools that can help in the strategic planning of an organization is the SWOT, which, based on the identification and analysis of internal and external factors, assists in the prioritization of strategies for actions, mainly in the market with organizational capacities. The simplicity in the elaboration, flexibility and use of qualitative and quantitative data, besides the incentive to the participation of the subjects involved in the processes have been factors that popularized this tool (D'Ambros et al., 2012).

Sabbag et Costa (2015) and Wright et al. (2011) emphasize that the SWOT analysis allows the organization to devise realistic strategies so that the stipulated objectives can be achieved. For the authors, this tool aims to enable the organization to gain an advantage in the environment in which it is inserted, or to minimize any type of environmental threat, that is, the enterprise tries to exploit its strengths and reduce the impact it can suffer because of its weaknesses. As shown in Figure 1, the SWOT analysis is made up of **Strengths**, **Weaknesses**, **Opportunities** and **Threats**.

After conducting the environmental analysis, the organization finds several aspects that can be addressed, so that there is efficiency and effectiveness of strategic planning. Some aspects are negative and should have a prioritization of treatment. Therefore, the points judged to have the highest potential for failure should be treated earlier than the points with the lowest potential. One tool that can be used in this scenario is the GUT (Severity, Urgency and Trend) matrix (Cesar, 2013), which is a way of prioritizing the questions, based on measures or subjectivity.

Each letter has a meaning: “G” stands for the severity or gravity of the problem and refers to the cost of not treating it; “U” stands for the urgency of the problem, and it concerns the time available to solve it, and finally “T” stands

for the tendency of the problem, that is, it implies what it can entail if nothing is done to treat it (Ferreira et al., 2014). The idea of the tool is to assign scores from 1 to 5 for each analyzed term (G, U and T).

		Internal Environment - Organization	
		Weaknesses (W)	Strong Points (S)
EXTERNAL ENVIRONMENT Environment	Threats (T)	Survival	Maintenance
	Opportunities (O)	Growth	Development

Figure 1. Structure for SWOT analysis/demonstration of qualification levels

Source: Feil et Heinrichs, 2012

Then, in obtaining the notes for each problem situation, they are sorted according to their classification, so that the organization can begin to reflect and develop strategies capable of mitigating and/or eliminating such problems. “The use of this tool promotes conditions of study of a specific problem, providing support for the elaboration of an action plan” (Ferroli, et al., 2000, p.15).

Methodological procedures

The object of study is the “ACJM” located in the city of João Monlevade in Minas Gerais. The municipality occupies an area of approximately 100 km² and has about 79,590 inhabitants (IBGE, 2017). The association is made up of 26 members, most of them are women, people with more advanced ages and has been working since 2001 in a space “ceded” by the city hall.

Methodological procedures included bibliographic and documentary research, action research, follow-up of the association’s daily activities, participation of internal and external meetings of the associates and/or partners of the enterprise, conversations with the collectors, follow-up and analysis of the selective collection program implemented in August 2015.

For Thiollent (2011) action research is characterized as an empirically based type of social research, which is conceived



through close association with action or solving a collective problem in which everyone engages in a collaborative way. It is a methodology that investigates situations and involves the work of groups, bringing together stakeholders, researchers and educators in a deliberate action.

With regard to the critical sense inherent to the chosen methodological aspect, the condition established by Franco (2005) is recognized. In this condition, the factor to be characterized as critical action research is the immersion in the praxis of the social group in which the latent perspectives, the occult, and the unfamiliar perspectives that sustain the practices are absorbed; thus, the changes are negotiated and managed in the collective. Therefore, so that the investigation could take on the critical nature of the research, required to consider and question the practices and concepts associated, generating dialogues aimed to identify new actions to the association.

According to Trip (2005), action research focuses on the elucidation of social and technical problems, which are scientifically prominent, bringing together in the same action the researchers, those involved in the problem situation, interested partners and also other actors in this conversion of reality, aimed at providing appropriate social, educational and technical responses and/or appropriate policies. In this way, action research is guided by transformation objectives in which a modification is planned, implemented, described and evaluated in order to improve its practice, through a greater understanding, both in the practice, and the investigation itself in the course of the proceedings.

3. RESULTS AND DISCUSSIONS

Associations and cooperatives, particularly those linked to the solidarity economy, face social, economic, political and environmental challenges, among others, in order to generate employment and decent income for their members. Thus, thinking about the management aspect is usually critical due to the profile of the people who usually make up these ventures. It is a fact that the question of management is also placed in traditional organizations; however, these organizations apply various techniques of administration and/or engineering and principles such as self-management and solidarity are not its foundations (Fernandes et Pires, 2016).

The authors still question whether the methods used by traditional companies can be replicated in self-managed ventures without losing their principles. For, in traditional capitalist organizations, decisions come from above, unlike associations and cooperatives, where members, through self-management, have a voice and collective decision-making power.

Thus, thinking about the organizational profile of the projects linked to the social economy in order to reconcile the need for an organization of a plan aimed at the sustainability of the association's actions and preserve its fundamental principles, it was decided within some current planning, to use the SWOT analysis and the GUT Matrix, based on the Strategic Situational Planning (PES).

The PES attacks problems and not sectors, as in traditional and normative planning. It considers that a problem is a synthesis of several interrelated realities (or variables) - political, economic, social, cultural, psychological, sociological, etc., that must be understood and interpreted before a plan itself. (...) If in the traditional planning the main concern is related to "must be", in the strategic planning it is related to "can be", that distinguishes the traditional strategic planning or the corporate planning, because it takes into account the capacity of the actors to intervene in the course of actions chosen (Gentilini, 2014, p. 587-589).

Thus, the results were obtained by means of a survey of the strengths, weaknesses, opportunities and threats, which were analyzed again, together with the associates, relating the severity, urgency and tendency of each problem detected.

SWOT Matrix Survey and Analysis

The SWOT Matrix was structured based on information gathered and developed within the reality of the members' perceptions and observations of the team of researchers. Several talks were held with the collectors, meetings involving members of the association, the main partners of the "ACJM" and works already developed previously, such as reports and scientific articles. The SWOT matrix from this phase, containing the strengths and weaknesses, the opportunities and the threats, of which the "ACJM" is exposed, is illustrated by table 2.

As for the forces identified, it is noted that the treasurer of the association has knowledge about all processes inherent to the organization and has been operating in the enterprise since its foundation. The association has a national reference infrastructure, since it has a large warehouse and has machines (presses, shredders, crusher of glass, among others) that help in the development of the activities. Regarding the selective collection, the city council provides a truck with driver, from Monday to Friday, to carry out the selective collection in pre-established neighborhoods. The



association has been consolidated in the municipality for more than ten years, and therefore has loyal customers. Some partner institutions, such as the UFOP Incubator for Social and Solidarity Enterprises (INCOP), promote training and advisory services that contribute to the improvement of activities carried out by members.

With regard to the opportunities, it is observed that the growth of the market of the recycling sector benefits the development of the association. Through the PNRS, the federal government directs municipal governments to prioritize the hiring of associations and/or cooperatives of collectors, if it exists in their city, to carry out the selective collection. However, if the association cannot meet the demand, the city may choose to hire third parties. Partnerships with local companies (buffet, restaurants, bars, etc.) would increase the volume of material collected, especially glass bottles. The renewal of the agreement with the city hall allows selective collection to be expanded to new neighborhoods.

As for the weaknesses, it was verified that some associates do not fulfill the working day established in the internal regiment, and, consequently, they damage the productivity and the organizational climate of the association. The high turnover of new members affects the work flow. The fact that only one association leadership has knowledge in terms of all the productive and bureaucratic processes, inherent in the association, generates a dependence on information, thus limiting the actions of the other associates. Due to the lack of knowledge management, there are no formal records on the actions performed by the associates. There is no psychological and ergonomic accompaniment for the members, affecting the prevention of accidents and the optimization of the organizational well-being. The lack of quality control impairs the efficient response to customers' needs, such as the quality of shredded glasses, as these are often processed without proper cleaning and are then crushed with packaging labels. There is no union and there are conflicts and intrigues among members. These are aspects that need to be analyzed in order to improve the interpersonal relationship.

Lack of specific and ongoing instructions/training for new members impairs overall association performance. Although INCOP proposes to give some training, there are leaderships that, due to the large amount of waste in the shed, believe that they should not have training because this would interrupt activities, harming production. The information about the events inherent to the organization is little spread among the members, generating discomfort. The poor use of the infrastructure (equipment, shed, etc.) generates high and unnecessary expenses. There is no partnership with buffet companies, restaurants and event places (generators of the main input, glass), which makes it impossible to obtain materials.

The association has trucks; however, there are no associates who have the license to drive these types of vehicles, which entails hiring third parties for such activity, raising costs. Members cannot meet the demand for materials arriving from the streets, even the association having a propitious infrastructure and all the necessary machinery.

Concerning the threats, emphasis should be given to the middlemen who buy products of the association for a lower value, compared to the recycling industries. Knowledge in terms of the productive and bureaucratic processes inherent in the association cannot be retained only with one person of the association; thus, it is necessary that other associates understand these processes, because in the absence of it, most activities are paralyzed. The closure of the agreement with the city hall would directly affect the sustainability of the association. The end of the partnership with institutions extinguishes opportunities for the construction of new knowledge for associates.

Survey and Analysis of the GUT Matrix

In order to prioritize the actions to be performed by the association, during its strategic planning process, the GUT matrix was used, as shown in Table 3, evidencing some of the main problems highlighted by the SWOT matrix.

Many problems had maximum values, and tied, but another GUT matrix was not needed, because the points that were detached can be treated simultaneously.

The existence of the selective collection program stimulates awareness in the residents and allows a greater amount of recyclable materials in the streets. This fact draws attention to "independent" pickers, who collect more materials on the streets. In addition, these scavengers sell materials to companies, such as supermarkets, which have similar machinery and market in the same way as the association.

A strategy to avoid competition is the union between the "independent" collectors and the association. Through this link, "independent" collectors would be incorporated as associates, as the value of the sale of materials obtained in the market by the association is better than if the "independent" collectors sold it to the middlemen (companies that buy materials for a price to resell to recycling companies). In addition, the association can draw up a work schedule to collect the materials that the pickup truck does not, since the current membership does not allow such articulation.

Through the contract between the association and the city hall, the collection truck makes its journey from 08:30 to 16:00. In the shopping center there are many establishments and the association is located near the center and



Table 2. Representation of the results obtained with the application of the SWOT matrix

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> • The treasurer of the association has knowledge of all the procedures and processes of the organization; • Transfer of tickets (municipal bus) by the city hall to the members to travel to and from the association; • Infrastructure of reference for associations of the same size; • The association is responsible for the selective collection in most of the districts in the municipality of João Monlevade; • Has an outsourced truck via an agreement with the municipal government; • Has customers for most of its products; • It has important partnerships as: Incubator of social and solidarity enterprises of UFOP, INSEA, city hall, among others; 	<ul style="list-style-type: none"> • Market growth and recycling sector; • National Policy on Solid Waste; • Possibility of making partnerships with local companies like: buffet, restaurants, bars, etc; • Renewal of the agreement with the city hall.
WEAKNESSES	TREATS
<ul style="list-style-type: none"> • Some members do not comply with the work schedule established in the internal regulations; • High turnover mainly among new members; • Centralization of information and knowledge regarding bureaucratic and financial processes by the leadership of the association; • Many members are not aware of their role and function as associates. And many decisions are not taken by the assembly; • Associated with low productivity and demonstrating demotivation; • Lack of knowledge management; • Absence of psychological and ergonomic accompaniment; • Lack of quality control in products delivered to customers; • There are conflicts and problems of interpersonal relationship; • Lack of training for new members; • Little diffusion of information about the activities and performance of the association with all members; • Poor use of infrastructure as equipment, shed, among others; • There is no agreement with organizations with potential for waste generation, such as bars, buffets, etc.; • Lack of associates who have a driver's license to drive the truck, which results in the contraction of a driver; • Lack of better planning of hours for selective collection, which causes loss of materials and, many times, of quality; • Accumulation of materials to be sorted, causing accumulation in the shed. 	<ul style="list-style-type: none"> • Presence of many middlemen; • Non-associated pickers acting individually in the street picking; • Centralization of information in a single person; • Possibility of closure and non renewal of the agreements with the city hall; • Appearance of new competitors; • Maintain customer loyalty; • Completion of partnerships with other institutions;

Source: Prepared by the authors and adapted from Alves *et al.* (2016)



every day there would be scavengers working in the city center after business hours to collect the materials generated by these establishments.

Table 3. Results of the GUT matrix

Problems	G	U	T	GxUxT
Failure to comply with working hours agreed in the internal regulations;	4	4	4	64
High turnover mainly among new members;	5	5	5	125
Non-associated pickers acting individually in the street picking;	4	5	5	100
Associates with low productivity and unmotivated;	5	5	5	125
Lack of knowledge management;	4	5	2	40
Absence of psychological and ergonomic accompaniment;	5	5	5	125
Lack of quality control in products delivered to customers;	5	5	5	125
There are conflicts and problems of interpersonal relationship;	5	5	5	125
Maintain customer loyalty;	5	5	5	125
Poor use of infrastructure as equipment, shed, among others;	5	4	3	60
There is no agreement with organizations with potential for waste generation, such as bars, buffets, etc.;	2	5	1	10
Need for new awareness campaigns on selective collection;	5	5	4	100
Better planning to carry out the selective collection in order to increase the quality of the materials;	5	5	5	125
Accumulation of materials to be sorted causing accumulation in the shed.	5	5	5	125

Source: Prepared by the authors and adapted from Alves et al (2016)

There is a multinational company in the city that buys all the shredded glass produced by the association. This multinational carries out strict quality control, but in the "ACJM" there is no verification of the policies and procedures necessary for the improvement and control of the quality of the material. Despite the existence of much of this material, in some occasions, delays occur in delivery according to the demand of the company. Another important factor is that this material has a high added value and makes a difference in the monthly amount generated.

Observing the day-to-day of the association, it is possible to see a great disunion of the group, which can be one of the factors that trigger moments of demotivation of collectors and consequently generate conflicts, lack of cooperation

among the associates, low labor, and low financial income of the group.

It is important that the association collaborates with professionals in the work psychology area to seek solutions to improve the organizational environment. This professional has the ability to contribute with a project or a goal plan that allows creating, for example, performance indicators, taking into account the ergonomic part of the work. It could minimize several problems, such as: work precariousness; retain new associates, enabling a harmonious environment; and consequently, the increase of the productivity of the association, privileging the quality in the working environment.

Another important factor to improve the grinding process of the glass is the implementation of the control that measures the quality level of the process and the final product, with the objective of creating a product that achieves the maintenance of customer loyalty and satisfaction.

4. FINAL CONSIDERATIONS

The objective of this work was to apply the SWOT and GUT matrices to the Association of Recyclable Materials of the Municipality of João Monlevade-MG to analyze its current situation and establish priorities in relation to the main problems raised, in order to serve as input for the construction of a strategic planning.

As there was not a strategic planning of the "ACJM", the joint application of the SWOT and GUT Matrices allowed carrying out a diagnosis of the organizational environment, prioritizing some strategic actions of short, medium and long term and identifying alternatives to deal with adversities currently faced by the association, in order to increase the organization's success and sustainability in the present and in the future.

Based on the obtained results, it can be concluded that the use of the SWOT and GUT matrices integrates elements from the external and internal scope, facilitates the strategic choices and the elaboration of possible lines of action. They can assist in reflection, identification, analysis and decision making that will influence at various levels and organizational aspects. Therefore, they are tools that contribute to the identification of aspects that make sustainability, productivity, customer loyalty, competitive advantage, among others, as important as those highlighted, facilitating the process of organizational planning.

However, it is important to take into account the profile of the group, since it is linked to the principles of the solidarity economy and to try to achieve sustainability in its planning,



it is necessary that democratic debates are carried out with the group, so that the actions are identified and defined by the associated as a way of inserting them as active members in the planning process and respecting their characteristics of cooperation, self-management and solidarity. This is because it is not possible to deploy instruments of traditional business environments in a cooperative because it could have its principles threatened.

Thus, the chosen path was the dialogue and involvement, not only of the associates, but of other actors that directly or indirectly influence the "ACJM", as public entities, private and civil society, and current and future actions, since the traditional planning generally considers the cause and effect relationship without taking into account social interventions. And all the social actors for PES are not different and are not disconnected from the reality problem, which needs the vision of the actors involved.

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