

# Supplier Performance Evaluation: A proposal based on Attributes and Development

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Received: 13 Sept 2020; Received in revised form: 14 Nov 2020; Accepted: 23 Nov 2020; Available online: 06 Dec 2020

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**Abstract**—The development of suppliers has emerged in the literature as a potential management strategy aimed at the search for competitive advantage by contemporary organizations. The adoption of evaluation measures as support instruments, in addition to providing opportunities for improving performance, also offers subsidies to buyers, managers, entrepreneurs and decision makers in activities that involve planning, operationalization, and supply chain integration. In the face of an increasingly technological context, forms of commercialization and relationships give rise to versatile methods, whose solutions are applicable to different situations and scenarios. In this sense, this work presents a proposal for a holistic approach based on attributes and practices of daily marketing, providing from this, supplier performance evaluation. To obtain it, the methodological framework consisted of a case study in a Brazilian television station, with emphasis on the suppliers that make up its supply chain. Results indicated that the adoption of the proposed evaluation method may represent a fundamental tool for buyers and those responsible for making decisions regarding contracting and strengthening strategic relationships. In addition, the findings suggested that the use of action plans with suppliers that presented unsatisfactory results has the ability to promote a positive relationship in building the partnership and improving performance.

**Keywords**—Business globalization, Supply chain resilience, Supplier management, Operations management, Relationship.

## I. INTRODUCTION

In the global business competition environment, supply chain management has become essentially important for business relationships, and also for organizations to create and sustain competitive advantages in products and services (Shishodia, Verma, & Dixit, 2019). According to Koberg and Longoni (2019), this management must integrate corporate functions internal and external to the company, covering, for example, the management of the total flow of the distribution channel, adding value from the supplier to the end user.

Expanding this view, Pettit, Croxton and Fiksel (2019) point out that to remain competitive, companies realized that it is not enough to just prioritize the improvement of internal processes, and it is necessary to prepare to

compete in the supply chain. According to Kannan and Tan (2002), this means adopting a strategy aimed at integrating and coordinating the main business processes, in order to create a supply chain that seeks to increase the performance and performance of everyone involved.

For these reasons, there is a high importance in the evaluation of suppliers and, from that, the elaboration of policies that contribute to increase the performance potential of the supply chain is essential in the current commercial relations (Vörösmarty & Dobos, 2020). Thus, trends described in the literature point to a new business posture, in which organizations direct their efforts focused on the customer (Govindan, Shaw, & Majumdar, 2020, Sunil & Sunitha, 2020). According to Schniederjans, Curado and Khalajhedayati (2020), this new attitude

directs the supply chain to an integration through information that represents an opportunity for companies to reduce costs, whether through leaner processes, elimination of waste, or even higher service levels. offered to customers, for example.

In this context, Moyano-Fuentes, Bruque-Cámara and Maqueira-Marín (2019) describe that the majority of suppliers are being placed at a strategic level in organizations and this is due to companies being focused on their essential skills and operations, mainly concentrating their efforts in your core business. For these authors, these efforts fall on a large number of suppliers, something that has led organizations to work together with their supply chain partners.

Therefore, the objective of this work was to propose a holistic approach based on attributes and practices of daily marketing to evaluate performance and supplier development. To achieve this objective, a case study was carried out on a television station with coverage in Brazil and other countries in the world. In this way, the contribution involves not only managers, industry professionals and researchers on the topic, but also, in the collaboration of the discussion on the prospecting of empirical evidence covering the supplier, in order to allow understanding to what extent the performance measurements are beneficial. for supply chain and stakeholder development.

## II. THEORETICAL REFERENCE

The economic development of nations has influenced trade relations and, therefore, increased competitiveness among organizations. Within this context, companies are becoming more and more involved and also dependent on know-how about logistics, in issues that aim to seek and meet market demands in the most efficient way possible (Shishodia, Verma, & Dixit, 2019).

Thus, the plurality of commercial relationships directly influences regulatory policies, suppliers and cultural and human behavior, which are also varied in supply chain networks (Kannan & Tan, 2002, Vörösmarty&Dobos, 2020). Considering these reasons, the literature has pointed out that unresolved difficulties with suppliers, added to management models that do not adequately measure the needs of supply chains have generated inefficient transactions (Koberg&Longoni, 2019, Pettit, Croxton, & Fiksel, 2019).

This opinion was also cited by Harland (1996), more than two decades ago, when pointing out that the performance of the supply chain must not only consider

customer satisfaction, but also be related to the reliability of delivery, the cost / price ratio and specific aspects of performance in the sector or segment. Durach, Kembro and Wieland (2017) expand this context by describing a trend in the literature to point out variability by sector, which need specific approaches that evaluate and contribute to the development of suppliers.

Indeed, the literature has long recognized the fact that suppliers play a key role in the performance of companies. Ford and McDowell (1999) point out that one of the possible reasons is the expressive costs of purchasing goods and services, which normally represent about 70% of the total cost. Therefore, due to the companies' dependence on their suppliers to be competitive in the market, the need for an effective management of the entire supply chain is highlighted (Kannan & Tan, 2002).

Zhu *et al.* (2018) argue that Supply Chain Management (SCM) has been perceived as a strategic tool to gain competitive advantage through collaboration with business partners, and provides a way to plan, organize, manage, measure and deliver optimally, products and services.

For Rajeev, Pati, Padhi and Govindan (2017) the scenario of growing demand for products gradually puts pressure on industrial production, generating impacts throughout the supply chain. The authors also emphasize that negative consequences of this phenomenon fall on the environment and society, whose effects have been perceived by the increase in pollution rates and environmental calamities. With this, researchers and industry experts are inclined to work on issues of sustainable production and consumption in the context of supply chain management.

In recent years, attention to consumers, companies and entities has acquired greater consistency in relation to environmental issues and the impact of human activities on natural resources (Toro, Franco, Echeverri, & Guimarães, 2017). Hänninen and Karjaluo (2017) reinforce that due to the increase in public awareness of environmental and social issues, and the greater rigidity in government regulation, companies cannot ignore these factors in their business processes, throughout the chain, because otherwise, may face serious problems in the market.

With this, in addition to criteria such as quality, delivery performance and technical capacity, which have traditionally been considered in the process of evaluating and selecting suppliers, companies are learning and attaching due importance in the acquisition of products and services from partners who can deliver them. them with environmental responsibility (Aissaoui *et al.*, 2007, Lee *et al.*, 2009, Balcik & Ak, 2014, Sinha & Anand, 2017).

Given the above, the evaluation of the performance of the supply chain has become essential with the visualization of the importance of suppliers for the success of companies. However, due to the complexity of relationships and connections, managing the performance of your suppliers is still a challenge (Maestrini *et al.*, 2017).

According to arguments in the literature, the supplier has a fundamental role in supply chain management, as an appropriate partner that can provide buyers with products and services in the quality and quantity demanded, at the right time and at a fair price, has positive and lasting effects on the results and competitiveness of the entire supply chain (Chen, Lin, & Huang, 2006, Araz&Ozkarahan, 2007, Cengiz *et al.* 2017).

Therefore, supplier performance appraisal becomes one of the most essential and important processes for successful supply chain management. However, Karsak,&Dursun (2015) consider that the evaluation process becomes a complicated process, due to the fact that it involves different suppliers based on a scope of different criteria, quantitative and subjective (Resat&Unsal, 2019).

Ho, Xu and Dey (2010) argue that in order to assess the performance of suppliers, several criteria must be considered and evaluated in relation to each partner. For this reason, the supplier evaluation problem can be considered as a multi-criteria decision-making problem.

For Suraraksa and Shin (2019), in supplier management, performance evaluation appears in at least two distinct stages of this process, the selection phase and the monitoring and development phase. However, for this last phase mentioned, few proposals are found for decision-making models for continuous consideration in monitoring and development (Silva, Ramos, Alexander, &Jabbour, 2020).

Maestrini *et al.* (2018) highlights that supplier evaluation does not offer benefits to the supply chain and the level of service provided, without practices that seek the development and improvement of members of the chain. Evaluating without assisting and directing actions that can promote development, according to Govindan, Shaw and Majumdar (2020), is the same as doing nothing, however, with an associated cost.

### III. METHODOLOGICAL APPROACH

The holistic approach proposed in this work was used in a Brazilian open commercial television network of multinational scope (research unit). To make this approach feasible, attributes and practices of this daily marketing

were used to compose a supplier performance assessment through a case study (Kant & Dalvi, 2017, Sousa-Zomer, Magalhães, Zancul, Campos, &Cauchick-Miguel, 2018, Bai, Kusi-Sarpong, Badri Ahmadi,& Sarkis, 2019, Shishodia, Verma, & Dixit, 2019).

Due to the multiplicity of suppliers involved in the context of a television network and, also, for the sake of convenience in carrying out this work, the selection was strategically prepared based on five requirements (Li, Fun, & Hung, 1997, Glas, Gaus, & Essig, 2018, Santos, Murmura, &Bravi, 2019, Silva, Ramos, Alexander, &Jabbour, 2020), which are related to the financial, temporal, managerial and operational dimensions of supply contracts: (1) contract over 12 months; (2) Supply contract with values greater than 179,022.18 USD; (3) Continuous supply service; (4) Have a manager responsible for the contract; (5) High daily volume of requisitions and purchase orders in the case of material supply.

Thus, considering the adopted case study method, requirements 1 and 3 became necessary due to the proposed approach having 4 cycles of annual evaluations to validate the award of the best performers. On the other hand, requirement 4 was fundamental for the realization of the approach, due to the evaluation having been carried out by supply contract managers, who, in addition to being responsible for the elaboration and monitoring of an action plan for development. The other requirements were established because they are of a strategic nature and, due to their relevant financial and operational impacts on the company's business.

Thus, a case study was carried out to assess and contribute to the development of suppliers (Sousa-Zomer *et al.*, 2018), through three complementary phases (Fig. 1). Therefore, in the formulation of the operationalization, the works of Kant and Dalvi (2017), Bai *et al.* (2019) and Shishodia *et al.* (2019).

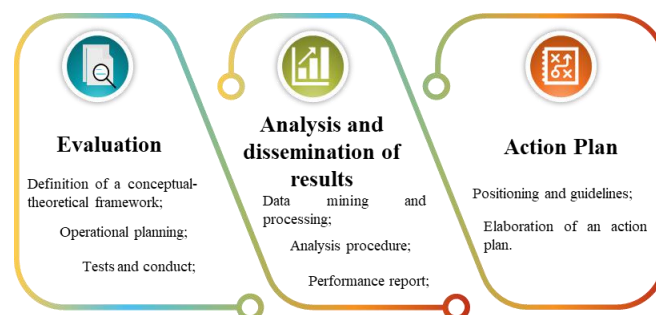


Fig. 1: Synthesis of the methodological approach.

In this approach, the evaluation phase considered in its conceptual-theoretical structuring the use of a Supplier

Performance Index (Li *et al.*, 1997, Santos *et al.*, 2019), which allowed measuring performance, and creating a direction for the development of strategic points and situations inherent to the daily life of the company and suppliers. Thus, according to Moyano-Fuentes, Bruque-Cámara and Maqueira-Marín (2019), an operational planning was prepared based on the evaluation, contemplating planning, performance and operation guidelines. Concluding this phase, according to Sunil and Sunitha (2020), tests were carried out to check the adherence and suitability of the approach in order to allow the proposals to be possible to be executed and, from that, guidelines were defined for the conduction of these proposals.

In order to corroborate the guidelines of this approach, a data treatment was performed through inferential analysis (Silva *et al.*, 2020), using an electronic spreadsheet and using the Statistical Package for the Social Science (SPSS) software, trial version. With a confidence level ( $Z$ ) of 90%, and a sampling error of 5% (Gonçalves, 2016).

Additionally, a mining was done to check for the presence of missing values. Thus, considering the subsidies and evidence generated, an inferential analysis was made (Govindan, Shaw, & Majumdar, 2020). Also, to verify the reliability of the data collected, Cronbach's alpha ( $C_\alpha$ ) was used, a value from 0.7 is considered acceptable (Acuña-Opazo, Gonzáles, & Cortéz, 2017).

As a result, a performance report was generated, which was made available to supply contract managers and supply managers for management and monitoring purposes. In addition, a Vendor List was made available to buyers, prepared using the Microsoft® Power BI platform, containing: supplier identification, information on service provision and / or material delivery contracts and supplier evaluation.

Finally, an action plan containing the current and desired positioning of the supplier was delivered to the suppliers and also made available to the contract managers for guidance and monitoring of the activities defined in the plan (Glaset *et al.*, 2018).

#### IV. RESULTS

This section presents the application of the supplier assessment and development approach. Thus, in order to promote a better understanding and verification of this approach, a case study of the daily life of a television broadcaster in Brazil and other countries around the world is presented.

In this way, the selection of participating suppliers was carried out strategically based on the five requirements listed above. With this, 34 suppliers were chosen (Space and Environmental Management → 4; Maintenance and Operation → 7; Business Security → 6; Services and Logistics → 15 and Production and Office Materials → 2), of these 94% act exclusively as service providers. services, while 6% are related to materials, and have strategic supplier status due to the high daily volume of requisitions and purchase orders demanded.

It is worth mentioning that all those involved collaborated responding to the assessment instrument and, after the data were processed through inferential analysis, missing values were not identified to be considered or discarded. Cronbach's alpha found in the analysis of responses was in the order of 0.876, establishing an adequate correlation between the items evaluated.

Then, to define the attributes (criteria and subcriteria) of the evaluation, a survey was conducted using a Supplier Performance Index. Concomitantly, a discussion involving the team of buyers from the areas involved and the managers of the supply contracts of the selected companies was conducted in order to consider the know-how and experience in the supply chain they have.

The compilation of the survey allowed the visualization of attributes of service providers (Table 1), among which ten metrics are related to the technical dimension of performance, three represent performance from an environmental point of view, two refer to documentation and finally, an index focused on health and safety in the provision of the service.

Table. 1: Definition of evaluation parameters of service providers

Criteria	Subcriteria	Description
Technique	1. Customer satisfaction	Technical quality of the service provided.
	2. Quality hired staff	Quality of the service provider staff.
	3. Hired team flexibility	Ability to manage requested changes.
	4. Operational excellence	Effectiveness and compliance with processes and procedures.



	5. Operational Availability	Planning and management of the contracted team.
	6. Compliance	Compliance with the contractor's rules and requirements.
	7. Compliance with the contractual SLA.	Compliance with deadlines established in the contract.
	8. Accomplishment of the Planning.	Compliance with monthly service planning.
	9. Payment / Receipt flow	Awareness and compliance with contracting and payment rules.
	10. Garment and PPE	Existence, condition and use of garment and PPE.
<b>Documentation</b>	1. Delivery of priority documents	Delivery of documents required by contract.
	2. Delivery of full documents	
<b>Health and Safety</b>	1. Occurrence of work accidents	Death, removal, temporary or permanent limitation resulting from negligence.
<b>Environment</b>	1. Legal requirements	Service situation.
	2. Environmental incidents	Occurrence of violations.
	3. Operational control checklist	Management, preparedness and response to emergency and environmental liabilities.

Legend: SLA (Service Level Agreement). PPE (Personal Protective Equipment).

After defining the attributes, considering the scope, each defined criterion can be considered applicable or not to certain suppliers or niches of activity, something that influences the data collection instrument (questionnaire) to be applied to each supplier company to evaluate performance. Thus, the managers responsible for the supply contract of the 32 participating service providers, carried out the analysis and definition of the criteria and sub-criteria to be used for evaluation, according to each area of activity, in addition to determining the importance weights (Tables 2, 3, 4 and 5).

Table. 2: Space and Environmental Management

Criteria	Subcriteria	Weight
<b>Technique</b>	Customer satisfaction	65%
	Quality hired staff	
	Hired team flexibility	
	Accomplishment of the Planning.	
	Payment / Receipt flow	10%
<b>Documentation</b>	Delivery of priority documents	
	Delivery of full documents	
<b>Health and Safety</b>	Occurrence of work accidents	20%
<b>Environment</b>	Legal requirements	5%
	Environmental incidents	
	Operational control checklist	

Table. 3: Maintenance and Operation

Criteria	Subcriteria	Weight
<b>Technique</b>	Operational Availability	70%
	Compliance with the contractual SLA.	
	Payment / Receipt flow	
<b>Documentation</b>	Delivery of priority documents	15%
	Delivery of full documents	
<b>Health and Safety</b>	Occurrence of work accidents	15%

Table. 4: Business Security

Criteria	Subcriteria	Weight
<b>Technique</b>	Customer satisfaction	70%
	Quality hired staff	
	Operational excellence	
	Operational Availability	
	Compliance	
	Payment / Receipt flow	
	Garment and PPE	10%
<b>Documentation</b>	Delivery of priority documents	
	Delivery of full documents	
<b>Health and Safety</b>	Occurrence of work accidents	20%

Table. 5: Services and Logistics

Criteria	Subcriteria	Weight
<b>Technique</b>	Customersatisfaction	65%
	Qualityhired staff	
	Compliance with the contractual SLA	
<b>Documentation</b>	Delivery ofprioritydocuments	20%
	Delivery of full documents	
<b>Health and Safety</b>	Occurrenceofworkaccidents	10%
<b>Environment</b>	Operationalcontrol checklist	5%

Regarding the performance evaluation of material suppliers, a technical criterion was used due to the existence of technical specifications for the items. This metric assessed whether the contractor has met the delivery deadlines set out in the contract.

After defining the evaluation parameters, there was an appreciation by the managers responsible for supply contracts. For this, a five-point Likert type scale was used to measure the degree of satisfaction of the suppliers' performance ( $\chi$ ), in addition to binary questions when this scale was not applicable (A - Very Satisfactory  $\chi > 90\%$ ; B - Satisfactory  $75\% < \chi \leq 90\%$ ; C - Regular  $60\% < \chi \leq 75\%$ ; D - Unsatisfactory  $50\% < \chi \leq 60\%$ ; E - Very Unsatisfactory for  $\chi \leq 50\%$ ).

For this work, 32 questionnaires regarding service providers were considered, which were submitted to six managers responsible for contracts, obtaining a response rate of 100%. The interviewees were focal points of contact with suppliers, therefore, they were familiar with the operation object of the evaluation. To evaluate the performance criteria of the two participating material suppliers, the issuer authorized and carried out on the Oracle ERP, a survey of the fulfillment of delivery deadlines for all purchase orders (OC's) issued to these suppliers in the last three months, during April, May and June 2018. It is important to note that for both supplying companies, the delivery time for the materials demanded through the OC's is three business days.

The Service Level Agreement was obtained considering the ratio between the number of purchase orders served in the term established in the contract and the total number of purchase orders issued in percentage. Within this proposal, suppliers were evaluated annually in

four quarterly cycles and classified according to the score calculated through the evaluations carried out each quarter according to the defined range (Fig. 2).



Fig. 2: Range available for evaluation.

From the use of the premises established in this work, considering the evaluation range (Fig. 2), through the treatment of the data obtained and the information gathered from the Oracle ERP, it is possible to obtain the evaluation of each of the 34 suppliers (Table 6).

Table. 6: Evaluation result

Area	Supplier	Performance (%)
<b>Space and Environmental Management</b>	A1	83.80
	A2	93.50
	A3	93.50
<b>Maintenance and Operation</b>	A4	87
	A5	100
	A6	100
	A7	100
	A8	100
	A9	94.40
	A10	93
<b>Business Security</b>	A11	86.70
	A12	58
	A13	59.74
	A14	79.37
	A15	95.44
	A16	90.87
	A17	96.50
<b>Services and Logistics</b>	A18	100
	A19	92.25
	A20	94
	A21	100

	A22	88
	A23	100
	A24	100
	A25	94
	A26	98.25
	A27	100
	A28	100
	A29	92.25
	A30	84.25
	A31	100
	A32	100
<b>Production and Office Materials</b>	A33	19
<b>Production and Office Materials</b>	A34	83

In this way, it was possible to carry out the classification according to the level of performance (Table 6), allowing buyers and managers to view the level of service provided by the station's suppliers (Fig. 3). The results clarify that 91% of the suppliers obtained satisfactory results, with 71% of them with a service level classified as very satisfactory, integrating the project's award group, which expects to recognize suppliers who perform above 90% in the annual evaluation.



Fig. 3: Performance Status.

However, there were suppliers with performance below the desired level (A11, A12, and A33), which represents 9% of the sample of suppliers participating in the evaluation. It is worth mentioning that, of the three suppliers with insufficient performance, two of them are from the Corporate Security area. For this reason, when verifying the performance of this, we verified the lowest average score among the areas (Corporate security 79.9%; Space and environmental management 89.4%; Services and logistics 96.2% and Maintenance and operation

96.3%), which can represent a point of attention for decision making and improvement.

Another important point to be emphasized is that the suppliers A33 and A34 are the only companies that supply materials, having as evaluation criteria the fulfillment of the delivery SLA. This means that supplier A33 made only 19% of deliveries demanded in May 2018 within three business days, as agreed in the contract, which indicates an alarming situation, given the importance of supplying items for the operation of the broadcaster. Supplier A34, on the other hand, demonstrated an 83% rate of order fulfillment within the delivery period.

Concluding a phase of evaluation and dissemination of the results, the performance results of the suppliers were made available to the managers responsible for the supply contracts and to the buyers of each area involved. And, based on these results, it becomes possible, in the long run, to build a database to manage all its suppliers and their performance. Immediately, a list of suppliers was created using Microsoft Power BI, containing information on the contracts for the provision of services or delivery of materials and also, according to information regarding the evaluations. The performance report was also sent by email to suppliers with good performance, to motivate them to continue to seek excellent levels of service.

Finally, aiming to work on continuous improvement in the supply chain through the definition of short and medium-term actions, which enable the development and adaptation of suppliers' performance to the quality levels desired by the broadcaster, action plans were prepared for those who performed with classification C, D or E in the quarterly evaluation (Fig. 4).



Fig. 4: Action planning and sanctions.

To collaborate with the development of the supplier, in addition to the development of an action plan, the possibility of applying sanctions was also envisaged for those who perform below the defined ideal or, continue in the same classification, even after planning and carrying out the plan of action.

Thus, suppliers classified as regular (C) continued with the preparation of the plan as a corrective measure to adjust criteria with lower than expected evaluation. Those classified as unsatisfactory (D), continued with the preparation and execution of the action plan, however, if the classification remains unchanged for the second consecutive evaluation cycle, these will be blocked for new hires. And, in the case of the “Very unsatisfactory” classification (E), they must follow the action plan, however, new contracts were blocked. In the latter case, the release for new hires will only occur after two consecutive cycles being classified as A, B, or C. Continuing, suppliers A11 and A12, service providers in the corporate security area were classified as

unsatisfactory and supplier A33 who operates in the supply of materials, classified as very unsatisfactory (Table 6), were directed to the action plan phase.

That said, the A11 supplier's action plan was designed with a view to working on actions to improve the critical criteria raised (Table 7). Within this context, operational availability was the criterion that performed the worst. It is important to highlight that, during the leadership discussions, this attribute was considered unanimously, extremely important for a service provider in the business security area, as it involves people directly (artists and public figures) in production and recording studios, inside and outside the station.

*Table. 7: Action plan prepared for supplier A11.*

Action	Justification	Responsible	Schedule	Method
<b>Training of employees with certificate issuance</b>	Need to train and specialize the team working in the workplace.	A11	July and August 2018	Training Program
<b>Study on staff dimensioning provided</b>	Low operational availability	A11 and Broadcaster	July and August 2018	Survey of the number of employees, areas served, shifts, reserve staff, etc.
<b>Increase in the number of employees available</b>	In case of undersized personnel	A11	September 2018	Hiring or allocation.
<b>Training and awareness of correct use of Garment and PPE.</b>	Little and misuse of the necessary equipment in the workplace	A11	July and August 2018	Training and availability of booklets and standards.

Another important critical point indicated was the deficient technical and operational qualification of the team. Professionals with little preparation or shallow training and competence to act in situations inside and outside the recording studios, this, in several cases, ended up influencing the operational excellence of the service. Thus, these points have a direct influence on the visualization of value and customer satisfaction of the broadcaster.

In addition to the right problems of direct relationship order with the issuer, several occurrences were also identified in which the supplier A33 accepted the purchase orders, however, it did not have items in stock or, as verified several times, the product in question was discontinued without market. Similarly, an action plan (Table 8) for these management issues was designed so that the broadcaster could have a more active and less reactive status for the orders to be delivered by the

supplier. Thus, a diary should then be sent by supplier A33 to the supply sector for open orders, containing: order identification, description, quantity report, delivery date, order status, reasons for non-delivery, and update of the order delivery date.

As a result, the supplier A33 now has another management parameter, something that resulted in increased service and control of the purchase orders demanded, in addition to the delivery times delivered. In addition, this plan allowed that in cases of discontinuity of products in the catalogs or lack of items in stock, quickly reported to the broadcaster, and then, a decision regarding the replacement of the item could be carried out effectively.

On the other hand, the supplier A33 presented a “Very unsatisfactory” result in the performance evaluation, being the lowest among all participants (Table 6). As it is a material supplier and its sole evaluation criterion is



compliance with the contractual SLA, this suggests that during the month of May of the year 2018, only 19% of the orders placed within the established delivery period were met.

This low performance brought several impacts to the broadcaster's operation, which often requires agility and speed in the acquisition of materials for use in scenarios and content production. In addition, the delay in delivery overloads the work activities of buyers, who, in some cases, due to the need to identify the causes of orders not being delivered, need to audit, check and update receipt dates, in addition to answering and resolving complaints of users demanding the materials.

Unlike the action plan prepared for service providers, in which the results can only be observed in the next evaluation cycle carried out each quarter, the results for the material suppliers, as in the case of company A33, are already observed right after the execution of the actions, due to the data referring to the SLA used for evaluation being automatically fed into the ERP system used by the broadcaster. Thus, after preparation, transfer, and monitoring of this supplier, the performance presented below was reversed in the following two months after the aid for the development of the same (Fig. 5).

Table. 8: Management action plan prepared for supplier A33.

Action	Justification	Responsible	Schedule	Method
Daily status report of open orders	Need for greater control and compliance with delivery deadlines.	A33	From June 2018	Report
Weekly follow-up meeting	Greater proximity and understanding of the status of orders and problems encountered.	A33 and Broadcaster	From June 2018	VideoCall



Fig. 5: Performance of the supplier A33.

A supplier evaluation and development approach allows integrating interests and conducting commercial relations effectively, monitoring them in a more timely manner, giving the possibility to evaluate them based on the company's strategy and objectives. In fact, thanks to the possibility of assigning notes to previously prepared and informed attributes, it is possible to manage groups of suppliers with different relevance to the company's business, as well as to contribute to the development of these stakeholders.

This narrative is supported by the results obtained, in which the supplier A33 obtained a significant increase in the rate of compliance with the deadline for delivery of materials in the first month of execution of the action plan. Of the 379 purchase orders issued to this supplier in June 2018, 81% were fulfilled on time, in the following month, by the time this work was conducted, 99 purchase orders had been issued to the supplier in question, and 91 % of them were delivered within the SLA defined in the contract, which suggests a positive impact of the plan in

relation to the development and performance of suppliers in the supply chain.

## V. FINAL CONSIDERATIONS

The main contribution of this work is that it provides insights on what and how to conduct the assessment and development of suppliers, taking this as a strategy for building mechanisms that increase performance, exposing different ways of establishing trust.

It is important to note that the supplier evaluation process differs from the supplier selection evaluation, in which some works include the qualification phase, where the partners do not yet have a relationship with the company and is only a possible candidate for supply.

In this sense, the empirical contribution contributes to a greater understanding of company-buyer-supplier relationships, the responsibilities involved and performance. Thus, managers can use the results achieved to identify gaps and possible developments in local supply chains. This will allow the proposition of actions that are relevant, while those responsible deal with specific issues of suppliers.

In addition, companies looking to expand their management and operations have in the proposed approach a tool that can assist in the understanding of existing organizational practices, enabling the development of

future strategies to deal with various local issues in the supply chains.

Another important contribution of this work is the possibility for managers to explore links between the social and the economic through the assessment of performance and development, aligning goals based on that. For students and researchers, these findings support the expansion of the scope of their research by linking issues related to social sustainability and the relationships between company, buyer and supplier.

Nevertheless, future research should seek to extend the contextual orientation of this work, researching intra-organizational and inter-organizational attributes (criteria and sub-criteria) inherent to supply chains. The inductive research project that gave rise to this work can be expanded through deductive projects for supply chains, based, for example, on a specific sector, as this work did.

### ACKNOWLEDGEMENTS

We thank the Operations Research Laboratory, Logistics and Transport (POLT) of the Federal University of Espírito Santo (UFES)/ University Center North of the Espírito Santo (CEUNES) by the academic and technical support in the design and development of this work.

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