Social Sciences

Proposal of a theoretical model to identify organizational decline

Ana Carolina Braga, Luis Mauricio M. Resende & Joseane Pontes

Abstract: This study aimed to propose a conceptual model of Identification of Organizational Decline, based on two indicators: Organizational Satisfaction Indicator and Financial Indicator. For the study, we used two bibliometric reviews, which, ultimately, associated the variables of the foundations of excellence in quality with organizational decline. As a result, we observed that the topic of organizational decline in companies has factors of managerial, physical, financial, and behavioral nature, and that their performances worsen by their lack of initiative in using the three planning processes (strategic planning, budget, and control) in a structured way. Regarding companies that seek excellence in quality, these concerns become increasing demands for their managers, who must develop responsible practices and tools to achieve a good performance, bearing in mind the constant search for satisfaction and retention of customers not only for the final product, but throughout the chain process. Thus, the literature on this topic is vast, and this study is justified because it notes a strong relationship between the lack of factors of excellence in management and organizational decline.

Key words: model, organizational decline, indicators, planning, indexes.

Introduction

The principles of Total Quality Management (TQM) started to be disseminated since 1950, but only started to be understood and implemented by most organizations in the late 20th century. Since this period, quality became valued by the market and treated as a strategic tool. Currently, companies realize the need to search for more quality and productivity in their processes, products, and services to remain sustainable and competitive, avoiding corporate meltdown and decline (Madsen & Desai 2010).

Academic research about has several origins. When analyzing them, it is noticed that companies must adopt some strategic postures to prevent this from happening and enable the development of indicators that collaborate with this analysis and identification of this process. This may help organizations understand the causes and strategies needed to reverse poor performance (financial or non-financial) throughout the production process.

Studies have shown a relatively recent literature on organizational decline, pointing the need to develop researches using as basis the view of the problem as a whole, understanding the issues surrounding the decline, its reasons, causes, and consequences (Carvalho et al. 2013, Batista & Medeiros 2014, Amankwah-Amoah 2016).

Therefore, by searching this relationship between the topics in the literature – management of excellence in quality and organizational decline – we observed that the first discussions on organizational decline emerged with the
need for expansion of quality management. However, unlike the theory, which studies the success and expansion of companies, the decline is lacking in conceptual definitions and empirical evidence with determinant variables. In addition, conducting studies about it is complex, as it is difficult to clearly determine when an organization is in decline and which are the internal and external factors that affect this process (Hamel & Valikangas 2003, Panicker & Manimala 2015).

First, excellence in management must be seen systemically within the organization, therefore that all links in the production chain are interconnected to maximize operational efficiency and effectiveness. The processes need to be continuously analyzed and improved to reduce errors, make them increasingly efficient, reduce costs, and keep customers satisfied not only during marketing, but throughout the process of product/service use.

Due to the fact, researches on how to identify decline in organizational performance become relevant, mainly by the economic and social impacts that decline may trigger (Panicker & Manimala 2015).

Thus, by the variety of concepts and lack of established model, one can see a gap in the literature regarding a conceptual debate about the causes and indicators of decline. Therefore, the following question is proposed as our research problem: Does the scarcity of practices and factors of the search for excellence in management allow one to identify whether a company is in decline, and can its variables be measured by indicators?

Thus, this research aims to propose a theoretical model of identification of organizational decline based on two indicators, defined as Organizational Satisfaction and Financial. These indicators were results of the analysis of articles on the topic in question, justified by the literature and allowing a differentiated proposal than what has been studied recently.

**MATERIALS AND METHODS**

For the research methodology, six steps with two systematic reviews were performed: the first to develop a review to analyze the state of the art of the researched topics and main existing models; the second to develop the relationship between the foundations of excellence in management and organizational decline. Figure 1 shows the steps of construction of the theoretical model:

For the bibliometric reviews, the aspects regarding the research methodological framework were addressed, with the bibliometrics intervention instrument Methodi Ordinatio, proposed by Pagani et al. 2015.

The first review consisted of a search for keywords in the title, combining:

- Organizational Decline × Quality services;
- Model × Quality management;
- Turnaround × Companies.

For the second combination, the expression "Organizational Decline" was searched in the title combined with expressions concerning the Foundations of Excellence in Management in the full text, which begat the combinations (Table I):

To complement the search, the Theses and Dissertations Catalog (Portal Capes) was also used, with the following keywords: Organizational Decline and Model of Excellence, without specific date period. This was done for identifying all studies on the addressed subject to verify related researches, as well as the gaps between them.
Table I. Combinations of keywords of review 2.

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Foundations</th>
<th>Combinations</th>
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<tbody>
<tr>
<td></td>
<td>Organizational Decline</td>
<td>“Organizational Decline” AND “Systemic Vision”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Organizational Learning”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Innovation”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Leadership”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Process and information”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Forward Thinking”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Value Generation”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “People”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Customer Knowledge”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Market”</td>
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<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Partnerships”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Organizational Decline” AND “Social Responsibility”</td>
</tr>
</tbody>
</table>

Figure 1. Steps of model construction.
RESULTS AND DISCUSSION

The collection of articles in the two reviews led to a total of 7063 published studies. From this amount, named as crude portfolio, some filters were used, with the following parameters: presence of repeated/redundant articles; alignment of titles with the topic; alignment of abstracts with the topic; and scientific recognition of the articles.

After this step, as Table II shows, 246 articles remained, composing the Article Database of analysis in the construction of the Theoretical Model:

The authors disregarded articles that did not have impact factor. This filter is justified by only requiring articles in journals with international relevance, resulting, therefore, in one more filter before the sum of articles for full reading, shown in Table III:

The articles were repeated in Table III because many of them appeared in both Review 1 and Review 2. This was possible because the second review presented the keywords in the title and in the full text, which caused many articles of the first review on models of decline to show up in the review on organizational decline combined with the foundations of excellence. Because of this fact, one more filter was added by the authors.

With the portfolio defined, it was analyzed aiming to quantify the existing information and provide the characteristics for the construction of theoretical model of Organizational Decline.

First, we identified the main models of Organizational Decline, the authors, the main results, and whether they describe turnaround strategies. The result of this analysis this analysis is summarized in Table SI- Supplementary Material:

Table II. Filtering results of reviews 1 and 2.

<table>
<thead>
<tr>
<th>REVIEW 1 (Filtering)</th>
<th>Quantity</th>
<th>Excluded</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles</td>
<td>3027</td>
<td></td>
<td>3027</td>
</tr>
<tr>
<td>Repeated</td>
<td>3027</td>
<td>953</td>
<td>2074</td>
</tr>
<tr>
<td>Title Reading</td>
<td>2074</td>
<td>829</td>
<td>1245</td>
</tr>
<tr>
<td>Abstract Reading</td>
<td>1245</td>
<td>1007</td>
<td>238</td>
</tr>
<tr>
<td>Full Reading</td>
<td>238</td>
<td>21</td>
<td>217</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEW 2 (Filtering)</th>
<th>Quantity</th>
<th>Excluded</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>4036</td>
</tr>
<tr>
<td>Repeated</td>
<td>4036</td>
<td>2992</td>
<td>1044</td>
</tr>
<tr>
<td>Title Reading</td>
<td>1044</td>
<td>34</td>
<td>1010</td>
</tr>
<tr>
<td>Abstract Reading</td>
<td>1010</td>
<td>551</td>
<td>459</td>
</tr>
<tr>
<td>Full Reading</td>
<td>459</td>
<td>188</td>
<td>271</td>
</tr>
</tbody>
</table>
As seen in Table SI, the empirical evidence of the described models shows the lack of actions of managers on the performance of the companies. The studies by Chen & Hambrick (2012), Batista & Medeiros (2014), and Guha (2015) show the causes and effects of decline, but do not describe how to identify its occurrence in advance, which are the determining factors in this process, and which are the variables that can be considered and measured systemically, i.e., in all sectors of the companies.

Some studies have shown which actions can reverse decline. Love & Nohria (2005), for example, found that the decline of industrial companies that proactively prognosticated it in a general way had a better turnaround performance. Similarly, Bruton et al. (2003) found that, when the company was declining, downsizing activities resulted in better performance and return to the competitive market. Nixon et al. 2004, however, found that the downsizing level of the company may have a negative impact on its performance.

Barker & Mone 1994 argued that the effect of strategic actions would be continuous in the condition of the company sector, and this would be feasible depending on the market situation, that is, factors external to the organization. Morrow et al. 2004 provided evidence that the reduction of assets leads to performance gains in growing industries. For the authors, the reduction of assets adversely affects the performance of declining companies, but cost reduction positively affects it. Similarly, Ndofor et al. 2013 found evidence that cost and stock reduction negatively affected the turnaround of companies.

Regarding the position of the manager, Barker & Mone 1994, however, did not find any evidence that managers who are involved in strategic actions in the reversal of internal factors have better performance than those who are not. However, as seen in other studies, companies that engage in strategic actions, especially in downsizing, experience reductions in the specific human and social capital of the industry and company, which are also considered internal factors of the organization.

The downsizing actions described in these articles usually refer to an organizational restructuring. There are two possible explanations that enable organizational restructuring to be an important factor for the company to not decline. First, Barker & Mone 1994 claimed that, in some circumstances, strategic actions were more a response to the severity of the decline as a natural way of short-term reestablishment than a turnaround strategy by the company. Companies that were declining for a longer period were more likely to engage in strategic actions as a way of restructuring.

Ketchen & Palmer 1999 showed that companies had a stronger decline had more strategic actions than companies with better performance. This occurred by the fact many good performance companies do not invest in actions of innovation and improvement of processes and products, for example. Several

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### Table III. Filtering results of the sum of the articles of reviews 1 and 2.

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Excluded</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles</td>
<td>488</td>
<td></td>
<td>488</td>
</tr>
<tr>
<td>Repeated</td>
<td>488</td>
<td>207</td>
<td>281</td>
</tr>
<tr>
<td>Impact Factor</td>
<td>281</td>
<td>35</td>
<td>246</td>
</tr>
</tbody>
</table>

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of them waited for the fall of production and customer satisfaction to focus on strategic actions.

Another interesting factor is that some studies operationalize strategic actions using changes in internal management indexes, which may often not affect recovery, since all studies observed that internal and external factors must be in harmony so that companies can get out of decline. It is important to know what these factors are. Ndofor et al. 2009 correlated performance indexes (for example, ROA) as an internal and external financial factor, but they did not mention what are the management factors.

It was noted that strategic actions are the real engine of performance gains in the long run. For example, Morrow et al. 2007 found that investing in the company resources to create new products by investing in customer satisfaction (since they are those who can interfere in the company’s performance) is of utmost importance. They also mention that knowing the market and the expectations and perceptions of customers is a primary strategy for companies to emerge from decline.

The same results were found when examining a broader spectrum of strategic actions. Ndofor et al. (2009) found that new product introductions, acquisitions, and strategic alliances are essential to reduce decline in growing industries. Similarly, Barker & Duhaime (1997) provided evidence that, among the companies facing decline, growing markets tend to engage in more strategic actions than stable industries.

The literature also showed that all business organizations experience external economic threats, however the objectives that address the conditions of economic decline must be defined and operational actions must be analyzed for the companies to obtain a greater chance for renewal and sustainable success. (Mckinley et al. 2014, Panicker & Manimala 2015).

In general, one can verify that the research examines and is based on the internal and external factors on the performance of the companies. Although the findings show a more consistent and positive effect of strategic actions, it is not clear what these actions are. In addition, as these actions are not independent of each other, they must be examined for their interactive effects (Amankwah-Amoah 2016). The studies show that decline has indicators (financial, physical, behavioral, and managerial) and that they cannot be considered in isolation; all areas of the company must be highlighted holistically.

Furthermore, although the researchers better understood the actions of companies in a turnaround situation, there are few theoretical advances performed as a measurement model in this area. Even though several models of decline that can contribute to the understanding of the research on this phenomenon were shown, much of this area remains without investigation. There is still much to learn about the causes and consequences of the decline of a company, about how the strategic leadership differs in the decline situations, how goals determine organizational turnaround decisions, and which are the internal and external variables responsible for measuring whether a company will decline or not.

After this analysis of existing models, in which the cause of decline comes from internal and external factors and the relation of good performance between companies comes from the use of tools aimed at improving quality management, one must know the studies and authors that identify how the lack of a foundation of excellence is considered a cause of decline.
Thereby, we analyzed the results of the second systematic review, which associated the Foundations of Excellence with Organizational Decline. Table IV shows these results.

The articles listed showed that quality or quality programs are expressions that have become part of the daily life of organizations, because it is impossible to face the current competitive market and the globalized economy without it. As seen in the decline models, organizations (independent of sector and size) face great challenges, allowing increased costs.

Table IV. List of the Foundations of Quality in Services and Organizational Decline.

<table>
<thead>
<tr>
<th>FOUNDATIONS OF EXCELLENCE</th>
<th>AUTHORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Culture of innovation X Organizational Decline</strong></td>
<td>Aarstad et al. (2015), Alti et al. (2013), Benza et al. (2012), Bon &amp; Mustafa (2013), Bozbura et al. (2011), Lin &amp; Chiang (2011), Pimentel &amp; Major (2014)</td>
</tr>
<tr>
<td><strong>Leadership and constancy of purpose X Organizational Decline</strong></td>
<td>Andjelkovic &amp; Dahlgaard (2013), Bozbura et al. (2011), De Souza et al. (2013), Hershko et al. (2015), Pimentel &amp; Major (2014)</td>
</tr>
<tr>
<td><strong>Appreciation of people X Organizational Decline</strong></td>
<td>Alolayyan et al. (2011), Asif et al. (2013), Bakan et al. (2014)</td>
</tr>
<tr>
<td><strong>Development of partnerships and social responsibility X Organizational Decline</strong></td>
<td>Alkelani et al. (2016), Asif et al. (2013)</td>
</tr>
</tbody>
</table>
decreased profits, and inefficiency in operations and processes to cause poor performance and new legal and regulatory demands, as well as a constant pressure for price reduction, more innovation, quality, and efficiency to be actions that companies must achieve to regain success.

The model of excellence in management establishes an integrated guidance, considering that the various elements of the organization and its stakeholders interact in a harmonic and balanced way in the business strategies and results. This model has some important features, such as: 1) it directs the results of companies that are looking for good performance and promotes organizational learning; 2) it allows an objective diagnosis and measuring the management maturity degree; 3) it emphasizes systemic integration and alignment; and 4) it is updated annually based on management practices of world-class organizations (Feitosa & Pimentel 2013).

A company that wants to achieve excellence must be able to achieve some foundations in its management. The foundations are based on a set of current factors that are translated into practices found in high-performance organizations. These foundations of excellence, when applied, bring improvements to processes and products, reducing costs and increasing the productivity of the organization, thus making it more competitive. The organization that adopts approaches of excellence adapts more easily to internal and external market changes and has more conditions to achieve and maintain a world-class performance. When applied in their fullness, they are internalized in the culture and present in every activity of the organization systematically (Chou 2014).

The studies by Bon & Mustafa 2013, Chou 2014, Ioniță & Gordaș 2012 state that the lack of systems thinking means shortage in the understanding and treatment of the synergy between all the manufacturing processes of products or services. They claim that companies must obtain strategic actions so that this link between production sectors is always observed.

Bozbura et al. 2011 say that declined companies shared no knowledge and experiences in pursuit of organizational learning. The cause of decline, for Alkelani et al. 2016, Androniceanu 2014, Duque & Gómez 2014 is that organizations that did not propose, in their strategic actions, the development of skills (by perception and reflection) to the effectiveness and efficiency of the processes, reached a lower performance than those that promoted actions in benefit of these factors.

Regarding innovation, all listed authors observed that the lack of innovation in the processes generates decline. Obsolete tools, machinery, and environments cause an organization to lose its competitiveness for companies that have in their structure innovation as way to final customer satisfaction, to exceed their expectations in the technological area.

In turn, Andjelkovic & Dahlgaard 2013 mentioned that the way the leadership acted within the company encouraged people towards the values, principles, and goals of the organization. The same authors say the interactive leadership actions can highlight new leaders within the organization, a factor of extreme importance to organizational restructuring, seen in the models of decline.

Al-Shafei et al. 2015, Androniceanu 2014, Doeleman et al. 2014 mention the guidance by processes and information as a determining factor in good performance. A company in decline does not understand and does not have segmentation of the set of activities and processes that add value to stakeholders. Its decision-making and execution of actions do not provide performance measurement and
analysis and may cause the company to go beyond decline, i.e., declare bankruptcy.

Asif et al. 2013, Bon & Mustafa 2013, Bozbura et al. 2011, Hershko et al. 2015, Ioniţă & Gordaş 2012, Jerônimo & Medeiros 2014, Lin & Chiang 2011, Pimentel & Major 2014 show in their studies that companies that do not aim for the future, i.e., understand the factors that affect the organization and the external environment, tend to poor performance.

Concerning value generation, Andjelkovic & Dahlgaard 2013. Asif et al. 2013, Bon & Mustafa 2013, Chou et al. (2013), Jerônimo & Medeiros 2014, Lin & Chiang 2011, Pimentel & Major 2014 showed that the range of consistent results certainly ensures success for the organization in the increase of tangible and intangible value in a sustained way for all stakeholders, which clients realize by the reliability and satisfaction of products and services.

Another important foundation for organizations to improve their performance and not decline is the appreciation of people. Bakan et al. (2014) mentioned that relationships with people, employees, and customers maximize performance by the commitment, skills development, and space for entrepreneurship, which makes organizations more competitive and proactive.

Alkelani et al. 2016, Androniceanu 2014, Batista & de Medeiros 2014, Bon & Mustafa 2013, Bozbura et al. 2011, Chou 2014, Clarke & Hill 2012, De Souza, et al. 2013, Doeleman et al. 2014, Duque Oliva & Gómez 2014, Hershko et al. 2015, Ioniţă & Gordaş 2012, Pimentel & Major 2014 say in their studies that the knowledge about customer and market is essential, both internal and external. The concern with this foundation is highly important for managers, aiming at the creation of sustained value to the customer and, as a result, generating greater competitiveness in markets.

Regarding the development of partnerships, Alkelani et al. 2016, Asif et al. 2013 report that the development of activities along with other organizations is seen as a way for companies to achieve cooperation and competitiveness, seeking benefits for both parties. If the company does not have these partnerships in its structure, it will probably decline.

Asif et al. 2013 address social responsibility. They observe that the lack of ethics and transparency of managers with all stakeholders and customers may create a negative image of the company and, in the long term, make them decline.

From this analysis of the two theoretical reviews, we propose a new approach to organizational decline.

Proposal of theoretical model

As noted above, there is debate at international levels about the effects of implementing foundations of excellence in management on the results of an organization. According to the results found by Feitosa & Pimentel 2013, there are two schools of thought: the first advocates a positive correlation between the adoption of a model of excellence and the performance of financial indicators; the second portrays that this relationship is irrelevant and that the adoption of the model can generate better performance only in the company’s internal management. (Miranda et al. 2012); (Feitosa & Pimentel 2013). It is assumed that companies can choose not to adopt excellence in management, but it is noted that its foundations are interconnected regarding the decline of the companies. Therefore, this study presents the hypothesis that a company may decline if it does not seek the foundations of excellence and does not provide strategies for the inclusion of these variables in its activities.

This justifies the fact that studies associate organizational decline as a result of internal and
external factors. There is no model that measures these factors, but we observed that, in addition to the financial factor, not adopting strategic actions results in organizational decline.

Another hypothesis of this study is the proposal of unifying the variables of organizational decline with the variables of excellence in management. Therefore, this research allowed us to suggest, in addition to financial, physical, behavioral, and managerial factors, the inclusion of another internal and external factor: excellence in management. This factor must be reallocated so that the management variables in common are transformed into only two indicators: Financial Indicator and Organizational Satisfaction Indicator. Figure 2 shows this proposal of model:

We observed that the theoretical model enables business managers to know the main factors regarding organizational decline.

The rate of decline will be a combination of the two proposed indicators. The lower the index, the less strategic actions must be implemented for the business turnaround.

For further studies, there is a need to allocate the specific variables of each indicator, aiming to stimulate their measurement and obtain, along with the theoretical model, a mathematical model for quantification. This will enable the measurement of the found variables to establish a control of each indicator and map a diagnosis of the reality of the company in a given time.

CONCLUSION

This study explored important information for those interested in the research on Excellence in Management and Organizational Decline. The objectives initially proposed were achieved by a proposal of theoretical model of Organizational Decline based on two indicators: Organizational Satisfaction Indicator and Financial Indicator. These indicators were a result of the analysis of 246 relevant and scientifically recognized articles, which were aligned with the research topic.

![Figure 2. Proposal of theoretical model of organizational decline.](image-url)
This study presented the procedures to select the most relevant articles on the topic, carrying out an analysis of the bibliographic portfolio to highlight the most important researches. This process made it possible to carry out a systematic selection of possible references, which started with 7063 articles and was reduced by filtration to 246 final articles, as shown in Table III.

To choose the selected articles, we define the keywords in a research axis and select the databases most related to the research subject.

For the analysis of the articles in the construction of theoretical model, we observed the main existing models in the literature, the variables used, the main indicators, and the relationship of the foundations of Excellence in Management with Organizational Decline.

With the construction of the theoretical model, we proposed a new approach for measuring decline, in which only two indicators show the Organizational Decline: Financial Indicator and Organizational Satisfaction Indicator.

In addition, the study described that organizations face great challenges and that their managers must allow strategic actions so they can measure when the organization will collapse. Measuring variables responsible for the decline along with variables foundation of excellence created a new model capable of providing specific information so that the problem does not worsen and the manager can see what factor is being responsible for the poor performance.

This research, therefore, contributed scientifically, because it found a gap between the models already described in the literature, in addition to providing scientifically recognized articles to justify the construction of the theoretical model.

As a suggestion for further studies, one must measure the theoretical model to validate and shape the variables found with the reality of the environment that will be introduced in it, and insert more indicators that were not found earlier.

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**SUPPLEMENTARY MATERIAL**

**Table SI.**

**How to cite**


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**ANA CAROLINA BRAGA**

https://orcid.org/0000-0002-9118-2270
Author contributions
The authors’ contribution to the research was through a four-year study. The author Ana Carolina Braga carried out this study for her doctoral thesis with the help and guidance of professors at the Universidade Tecnológica Federal do Paraná. The authors Luis Mauricio M. Resende and Joseane Pontes corrected in all stages of the study so that the research became original and relevant.