The gradual development of the control systems and management of information about the organizations environment through measurement systems made, in this day and age, the reflection of reality. For the Brazilian franchise system this relationship is not different, evidenced by the variation of more than three times the amount raised in comparison to gross revenues achieved since 2001. Given this scenario of growth, this article has for primary objective to propose a performance measurement system for a segments of existing franchises in Brazil, through the elaboration of indicators related to external factors considered business critical success factors, based on financial and non-financial data made available publicly by the Brazilian Franchising Association (ABF). As a result, five performance indicators were developed for the system in question, in addition to the application of this model in a specific thread within the franchise system for the purpose of analyzing the information obtained and testing the reliability of the parameters used, identifying both that the model is reliable in accordance with the criteria established.

Keywords: Measurement Performance System; Competition; Franchise
1 Introduction

Currently, the competition for keep and expand new markets makes the management and systematic control of the data regarding the business become a highly necessary task, where the assessment of the position in which the company is, in relation to the market, one of the correct paths to follow to become diffuse and independent data in accurate information, to demonstrate the real behavior of the system in which it is inserted (KAPLAN E NORTON, 2008; PORTER, 2009; PARMENTER, 2010).

With the growing competitiveness between organizations observed since the last century, the interest in studies about the dynamics that involve organizations is present in academic subjects, expanding to the franchise market and, in particular, to the development of the franchise system in Brazil and your economic importance, being directly linked with entrepreneurial studies in the relationship between franchisees and franchisors, characterized, mainly, through the relationship between mortality rates of business, where franchises have a smaller 20% in relation to new ventures that does not have this kind of support (LACOMBE E HEILBORN, 2003; ABF, 2012).

In this sense, this article has for main objective to demonstrate the application of a model for the performance measurement of an existing franchise segment in Brazil, through the elaboration of indicators related to the external factors critical success considered as the most relevant for franchise system, including the verification of the results obtained for each branch of activity, in order to identify potential points of improvements, evaluating the behavior of the results as the proposed calculations. It is important to warn that is not the focus of work to recommend, advise or link any information regarding the particular situation of any of the companies studied, but to highlight the plight of companies jointly, as the proposal found in the study.

In order to meet the characteristics of the system, the methodology involves the applied research, using as the basis of the research the intuitive method, starting from the observation of the characteristics of the particular case in relation to a segment of franchises until checkout. Because it is a modeling based on experimentation, was made possible the use of statistical techniques to test the level of model confiability, in order to carry out the control of variables used, featuring as a quantitative analysis, thus avoiding the production of effects confused and unrelated to reality searched (GIL, 2010; MINAYO, 2010).

As for the performance measurement system, it was proposed the use of the methodology known as KPI in conjunction with the method of indicators standardization proposed by the PerformancePoint Server software (2007)®, widely spread for the conversion of different scales in common scales standardized metrics, enabling the development of general classifications, in order to compare the values established for the purpose of research. In addition, the technical means for the research of the problem are based monographic method, and the primary data was collected through semi-structured information public organizations studied, through the official franchise guide 2012 prepared by ABF, plus the use of references and reviewing documents with scientific basis to support and clarify the problem discussed in descriptive form.

2 Theorical References

The performance evaluation is a process inherent in human nature, where interaction and action between the various members of one or more groups are analyzed according to optics and the goal of the individual evaluators (NEELY, 2005; KAPLAN and NORTON, 2008; PARMENTER, 2010). In this way, after the evaluation of the available systems in relation to the system where you want to model and develop performance indicators, we opted for the use of KPI (Key Performance Indicator) as parameters of the model, to be able to define as financial and non-financial metrics used to express the evaluation of critical success Factors (FCS) of an organization or project, in order to obtain
quantitative results on certain activity for a given period of time (OLSON and SLATER, 2002; PARMENTER, 2010; PAVLOV E BOURNE, 2011).

Inserted in the context of retail products, the franchises can be regarded as a form of commercial business that encompasses, among several factors, the production and distribution of consumer goods, established under contracts signed between two parties: the franchisor, responsible for the brand and the franchisee, which signals with the use of the same (AAKER, 2004; RIBAS, 2006; MAURO, 2006; SILVA and AZEVEDO, 2012). In Brazil the franchises that belong to the category called regulator of the Brazilian Franchising Association (ABF) reached in 2011 an annual revenues of $ 44 billion, equivalent to about 2.14% national GDP, through a network with more than 2,000 companies distributed in a total of approximately 93,000 franchised units throughout the country, generating a total of 838,000 jobs directly (VÁZQUEZ, 2005; MAURO, 2006; ABF, 2012).

Due to the success achieved with the expansion of recent years, the industry has been undergoing a process of activities expansion, resulting in an average gross growth of 16% per year since 2005 and in more than 200% considering the difference between 2001 to 2011, according to the description mates in Figure 1. Some points are of fundamental importance for the notorious growth of franchises like: safety in relation to the investment made against financial crisis and opportunities economic recessions, increasing the number of people living in urban areas and lack of services and products that meet the demand required by the population (CRETELLA, 2003; WINDSPERGER and DANT, 2006; LAVIERI, 2008).

Figure 1: Data about the Brazilian franchises of 2001 to 2011. Source: Based on ABF (2012).

Because of this expansionist characteristic, the feature is considered a franchise management innovation that has radically modifying the vision of the small and medium entrepreneurial, characterized by the structure of networked collaboration, thus to the other aspects of your organizational architecture, requiring business management and technological forms most evaluated than traditional enterprises (RODRÍGUEZ et al., 2005; GRUNHAGEN and MITTELSTAEDT, 2005).

3 Proposed Model

The steps of the modeling process follow the definition of indicators targeting the construction of metrics through hierarchical levels, where the central strategy for the proposal has been defined as the study of the current context of Brazilian franchises, by determining the level at which each segment of franchising held their activities, taking for reference the year 2012, where the determination of objective indicator (Iobj) was performed through of the various formatting categories belonging to the franchises group of the model, following the parameters and guidelines set out and the way in which these interact with each other, using Equation 3.1 below described:
where the variable $c \in \{1, 2, ..., n\}$ is the number of existing branches in the analysis and $Iram$ is the set of indicators found for each organization ($Iemp$) belonging to categories of franchise segment in question, in accordance with the Equation 3.2,

$$Iram = \sum_{f=1}^{n} Iemp_f$$

for $f \in \{1, 2, ..., n\}$ represents the number of companies that are listed according to each branch. The determination of the target ($Iobj$) for the $Iobj$ obeys the criteria where performance is considered satisfactory according to a parameterized value between a maximum ($Iobj_{max}$) and minimum ($Iobj_{min}$) of scores that this indicator can achieve, involved by defining variables of expected behavior for the studied context $\delta$ (in relation to $Iobj_{max}$) and $\gamma$ (in relation to $Iobj_{min}$), where the higher the value of $\delta$ and the smaller the value of $\gamma$, less demanding is the model proposed, according the established instructions of the Equation 3.3:

$$\delta + \gamma = 1 \iff \begin{cases} Tseg = KPIseg_{max} - \delta \\ Tseg = \gamma + KPIseg_{min} \end{cases}.$$ (3.3)

The strategy on the part of the franchisor should be directly linked to the input factors to market, as well as stabilization of attraction and differentiation factors aimed at the protection of the quality of the products or services offered (ROTHAERMEL et al., 2006). It is also considered the status of the relationship between the franchisor and franchisees, even empirically, in order to develop the effective management of information incorporated in the system, focusing on activities and indicators capable of generating good results for both focused to generate a sense of unity and mutual cooperation between the two parts (CORONA, 2009).

The economic bases of franchises are directly linked to possible operating profit or loss that the company may represent for the stakeholders, being a major factor for potential generations of opportunity (ALON, 2006; CASTROGIOVANNI et al., 2006). Thus, to make the decision to invest or not, it is necessary to take into consideration the market value of the franchise, which is the present value in relation to receivables future values discounted cash flow, considering the investment, expenditure and revenue over the all periods, in order to apply criteria for the application of investment analysis (RAUCH et al., 2009).

In this way, the strategic study of these two dynamics serves as the basis for determining the situation of a franchise on their direct and indirect competitors. To this end, in addition to the references already cited, literary works have been used as the basis of Shane and Maw-Der (1999), Dant and Kaufmann (2003), Lafontaine and Shaw (2005), Alon (2006), Mauro (2006) and Silva and Azevedo (2012), assisting in the definition of performance indicators developed for the measuring system shown in Table 1 below.

<table>
<thead>
<tr>
<th>Indicator (Basis)</th>
<th>Definition</th>
<th>Id</th>
<th>Measurement Unity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of franchise system (non-financial)</td>
<td>The customer demand is directly related to spanning condition of franchises, as it branch of activity and the products/services sold, to facilitate access of customers and increase the mark exposure.</td>
<td>II</td>
<td>Absolute</td>
</tr>
</tbody>
</table>
For this case is related to three basic criteria for the measurement of excellence: (i) the awards by a recognized organization in the franchise system; (ii) the growth rate of the franchise since your opening; and (iii) the services offered by the franchisor in relation to franchisee, through the definition of thirteen aspects of support, based on the works of Dant (2006) and Windsperger and ABF (2012).

By definition known as the portion of the remuneration of the capital invested, the measurement of profitability to acquire a franchise for the franchisee is critical to guide towards choosing the best alternative among several financial options available on the market.

The monthly gross revenues reflects the conditions of products sales and services, with a focus on quantity or value added through marketing, being the indicator that best understands the potential of generating financial gains by the franchisor with the use of the mark.

In order to appreciate the balance in the relationship between the franchisor and the franchisee, the projection of remuneration rates can be performed depending on the type of franchise, where considered the costs related to the development of the strategic plan and the franchising system until the economic balance point.

The conclusion about the use of this number of indicators is assumed in order to more clearly express the facts about the franchise system, including the factors set as more relevant to your valuation. As described previously, the calculation of the \( I_{emp} \) is dependent of the relationship between the five indicators defined, but cannot perform the direct comparison of these, because each one has a unit of measure feature set according your metrics, being required to either perform normalization of each of them to the same default unit of measurement, in this case the percentage (\%). To this end, the methodology of standardization proposal is based according to the applied by PerformancePoint Server® software (2007), occurring through the elaboration of six sequential steps of processing of the data, described by Figure 2.
Figure 2: Steps to achieve the indicators standardisation. Source: Based on PerformancePoint Server (2007)®.

After this data processing occur the verification of the performance level of each branch and, consequently, of the sector chosen for the study, based on the evaluation of each companies, according to the Equation 4,

$$I_{temp} = \sum_{i=1}^{n} I_{norm}$$

(3.4)

Being possible now perform the calculation for $I_{obj}$ proposed previously by Equation 1, to get the final value to be compared with the proposed target in $T_{obj}$, generating the possibility of obtaining conclusions regarding the application of the model.

4 Application

For the test of modeling, it is proposed to study application for franchises associated with the category Alimentation, because these besides having a high rating in relation to annual gross sales of franchises in Brazil (second with 22% of the market), have the highest growth rate, for the same criterion, found since 2010 (104%) (ABF, 2012). Thus, in order to find similar companies in the same group, the ABF separated the category into three distinct segments: Alimentation in General, Bars/Restaurants/Pizza Shops and Drinks/Coffees/Candies/Salted, being of particular interest at that time the study of the last.

This group is consisting of four branches named their way to this title, where the calculation is proposed from the prior definition on the part of researchers the limits and ranges of values that make up the indicators standardisation, shown from the Table 2 below:

<table>
<thead>
<tr>
<th>Track</th>
<th>Superior Track</th>
<th>Lower Track</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30%</td>
<td>0%</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>2</td>
<td>50%</td>
<td>31%</td>
<td>Reasonable</td>
</tr>
<tr>
<td>3</td>
<td>75%</td>
<td>51%</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>90%</td>
<td>76%</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>5</td>
<td>100%</td>
<td>91%</td>
<td>Very satisfactory</td>
</tr>
</tbody>
</table>

Source: Authors.

It is possible verify that were scaled five tracks, in which the raw score may be located between the extreme values 100% and 0%. With this, there was the preparation of calculations for each of the four indicators of the model, in order to show the effect of each on the total for each branch, as shown in Table 3.

<table>
<thead>
<tr>
<th>Branch</th>
<th>Franchise</th>
<th>$I_1$</th>
<th>$I_2$</th>
<th>$I_3$</th>
<th>$I_4$</th>
<th>$I_5$</th>
<th>$I_{ram}$</th>
<th>$T_{obj}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinks (c=1)</td>
<td>10</td>
<td>71%</td>
<td>66%</td>
<td>61%</td>
<td>22%</td>
<td>62%</td>
<td>57%</td>
<td>70%</td>
</tr>
<tr>
<td>Coffees (c=2)</td>
<td>13</td>
<td>62%</td>
<td>51%</td>
<td>53%</td>
<td>32%</td>
<td>69%</td>
<td>52%</td>
<td>70%</td>
</tr>
<tr>
<td>Candys (c=3)</td>
<td>30</td>
<td>72%</td>
<td>67%</td>
<td>70%</td>
<td>33%</td>
<td>58%</td>
<td>61%</td>
<td>70%</td>
</tr>
<tr>
<td>Salted (c=4)</td>
<td>16</td>
<td>60%</td>
<td>59%</td>
<td>66%</td>
<td>26%</td>
<td>68%</td>
<td>55%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: Authors.

According the study, the Candy branch, with 61% points, are ranked as the most successful for the case. The fact that determined basically by the good result obtained for indicators that have non-financial (70%) and financial (53%) basis, due to the predominance of their scores in relation to four of
the five proposed, a fact that is not observed only for I5 (58%) because to the relative ratio of the values characterized as monthly fees to be 4% higher compared to second worst (Drink branch). Thus, as key points for the success of this business group has the highest absolute number of open networks in the country (2,355 networks), mainly due to the products featured as marketing of chocolates, which typically have a wide dissemination of marketing in Shopping Centers in Brazil.

Then the Drink branch won second place with 57% of total score achieved, due mainly to non-financial indicators (I1 = 71% and I2 = 66%), in which factors such as average total of open networks by franchise (124), 58% higher than found for the second best placed (with an average of 79 companies), in addition to registering a growth rate of their franchises until 2012 22% higher than found in other branches, being these two characteristic points of the strong market presence of this brands towards consumers.

As the third major branch is the characterized by Salted, with possible score reached 55%, which observed results within the average for the two natures of the proposed indicators. Finally, the branch to which qualify the companies whose nature of operation called as Coffees is ranked as the worst placed, with just 52% of the value reached, although in relation to other groups have a high value for I5 (69%), in general as not to replicate this good result for the value surveys, mainly on the relationship between investment and benefits with the possible gross sales to be hit, thus creating low cost monthly fees to be spent with the franchisor, but at the same time, not allowing on average good earnings prospects in the medium term for the business.

In General, through the calculation proposed by Equation (1) and to a target set as 70%, it was possible identify that the Drinks/Coffees/Candies/Salted achieved a segment result of 57%, 13% less than the stipulated minimum of consolidation, in which similarly none of its four branches trainers exceeded expectations of performance calculated in $Tobj$. It is a special highlight to the results found in $I4$ for all groups, established from an average value equal to 29%, with the result of terrible relationship for the estimates of gross financial returns (overall average of $23,000.00/month for franchise), fact that it should be special attention to point at the time of formatting of each business plan, especially when comparing these values with the proposed investment value for its opening (overall average of $130,000.00) in order to offer an attractive more to their current or prospective investors.

For the verification of the level of confiability of the model variables, is proposed the use of the technique called sensitivity analysis, in order to simulate the possible behavior to be obtained with the change of the model standards, through the modification of $Tobj$ values, in order to be able to see the final seeding behavior where the focus in this case is directly linked to the results of each of the five branches belonging to segments studied, according to the Figure 3.

![Figure 3: Sensitivity Analysis for $I_{obj}$ in relation to variations of $Tobj$. Source: Authors.](image-url)

It is notorious that, according the variance of the values of the target, the variables are different behaviors in the evolution of the \textit{Iram}, not being found significant changes in ordering between the branches, even in the range which permeates the \textit{lobj} variation of 15\% to 32\%, where they found a reversal with coefficient of variation of less than 1\% between \ldots\ldots\ldots and \ldots\ldots\ldots, in order to be coherent to say that the model has a standard variation of the indicators, respecting the characteristics of the curves obtained and taking into consideration the profile of the branches analysed.

5 Conclusions

As a key concern for the development of model has become the reflection of the indicators as the reality found to the situation of each companies involved, from the perspective based on financial and non-financial issues, in order to serve as standard concrete and feasible analysis to interested in the model.

How can positive consequence by obtaining of results is the possibility of verify the level of potential growth of the company towards your direct and indirect competitors, as well as the detailed analysis of how each branch, in relation to the context, is contributing positively or negatively to the segment result as a whole. Therefore, this work is in accordance with the provisions in the proposal initially, contemplating the basic methodology and factors able to meet initial demand analysis of the situation of the franchises with the context in which they are inserted, from the perspective of organizational performance evaluation.

Finally, it was diagnosed as a limitation of the model the lack of contextualization focus of the indicators in relation to the behavior of deployment in a specific demographic region and your regional quirks, whether geographical or seasonal cultural and social relations, especially of potential consumers, because the model treat only the direct relationship exists between the franchisor and the franchisee, in order to consider these data type only of intrinsic way. For future studies, it is hoped the development of measurement models based on other methodologies such as data envelopment analysis and multi-criteria schools in support of decision-making, expanding the horizon of knowledge can be obtained with this kind of verification.

References


