

# **Competitive Advantages of the Beira Interior (Portugal): A TOWS Approach**

***João Ferreira***

Assistant Professor, at University of Beira Interior, Ph.D. in Management

E-mail: [jjmf@ubi.pt](mailto:jjmf@ubi.pt)

***João Leitão***

Assistant Professor, at University of Beira Interior. Ph.D. in Economics

***Mário Raposo***

Full Professor, at University of Beira Interior. Ph.D. in Management

*Abstract:* The formulation of a competitive strategy implies an extended understanding, in terms of the industrial structures, of the mains fields where the nations compete and those structures evolve. The environmental conditions of a region, and of its industries, determine both the generic strategies, and the alternative strategies, which are already implemented.

One of the instruments for strategic analysis, which combines external variables and internal variables, is the TOWS Matrix. This instrument allows the analysis of the present strategies, and the relationship between the variables, and also the presentation of proposals for alternative strategies, in order to identify or to reinforce the competitive advantages of the unit of analysis.

Considering as unit of analysis the region of Beira Interior (Portugal), this article aims to provide a TOWS Matrix application. Several strategic alternatives for the region are, also, presented, taking into consideration the opportunities and the forces, previously, detected, in order to assure the transition for the ideal strategic quadrant. Finally, the conclusions and the guidelines for future research are presented.

Key-Words: Strategy, TOWS Matrix, Entrepreneurship, Innovation.

JEL: M0, M1, M13, O31.

## **1. Introduction**

Nowadays, one of the key aspects for the firms, if not the main determinant, is their competitiveness. Traditionally, the efforts to explain the competitiveness of a country have been based on an aggregated perspective, concentrating on the characteristics of the factors, in the macroeconomics indicators and in the government politics. However, it has been verifying that the traditional theory of the comparative advantage it is not enough to understand the new demand patterns that the countries have to face. Porter (1990) defends a new paradigm of competitiveness, based on a process of dynamic innovation of the firms and industries. A local context that supports the innovation and the entrepreneurial initiative encourages the competitiveness. Porter (1990) refers that interrelations among the firms, the institutions and the industries sustain and develop the competitiveness of a region. The strongest interrelations happen when the firms or the institutions with different competences overcome the communication barriers and of collaboration and face a common threat together or take advantage an emerging opportunity.

The globalization of the economies and the mobility of the factors, don't allow thinking just in terms of the existence and of the ownership of the resources, because what determines the competitiveness is the form as those resources are used (Grant, 1991; Peteraf, 1993; Porter, 1998).

The resources should have some capacity to generate profits or to avoid losses. A general availability of the resources tends to neutralize the competitive advantage for the firm, once to win high levels of performance and a sustainable competitive advantage needs to possess resources that are heterogeneous and difficult to create, of substituting or of imitating by other firms (Miller and Shamsie, 1996).

The competitive value of the resources can be enhanced or eliminated through changes in the technology, in the competition behaviour, or in the buyers' needs, aspects that would be neglectful if the analysis focus was only in the internal resources (Porter, 1985).

As Chandler and Hanks (1994) state the resources and the capacities supply a satisfactory base for the formulation of competitive strategies. However, the formulation of a competitive strategy involves a sophisticated understanding of the industry structure in which the firm competes and in the way as that structure develops.

According to Porter (1985), the differences in the structures economics, values, cultures, institutions and national histories contribute to the competitive success. In any industry, the core of the competitiveness is centred in five competitive forces: (1) the strength of competition; (2) the power of buyers; (3) the power of the suppliers; (4) the potential for entry into the industry by new firms; and (5) the strength of substitutes for the industry's products.

Those factors (or competitive forces) determine the profitability of the industry once the first ones condition the prices to practice for the firms, the costs that have to support and the necessary investment for performing.

The conditions of the environment of a region and their industries influence strongly the form as firms are created, organized, managed and the choice of their strategy. The changes of the conditions of the environment create as much new opportunities as new threats to the firms. These changes can modify the consistency between strategy and environment and press the firm to select a different strategic orientation (Burnes, 1997).

This way, it becomes fundamental to analyze the specific characteristics of the environment in that the firms interfere, through a detailed diagnosis that allows to the firms and other agents to detect their competitive advantages and develop the strategy in a sustainable way. For that effect, the firms can take for granted some analytical instruments that allow to obtain them a detailed diagnosis of its internal situation and also of the environment in that they are inserted, in the attempt of identifying the nature and the causes of their restrictions and potentialities. The TOWS matrix or situational analysis is one of the instruments more evidenced in the literature, (Weihrich, 1982). This matrix is constitutes with concepts of strategic planning as: the Threats (T), the Opportunities (O), the Weaknesses (W) and the Strengths (S).

The TOWS matrix is a conceptual structure that combines the external variables with the internal variables allowing establishing relationships among those variables and the strategies of the firm. As management instrument, the matrix makes possible to the decision makers to analyze the situation of the firm and to develop strategies, tactics and effective actions that can run into the organizational objectives and the mission. The TOWS model can be applied to different units of analysis, in other words, so much at joined level, for effects of diagnosis of the competitive advantages of a nation, as at regional level, for identification of the competitive and strategic variants of a region (Weihrich, 1982; 1999; Guedes, Leitão, and Silva, 2002).

The study that is presented here has as main objective to use an application of the analytical tool of the strategic conduct of the TOWS Matrix, which was proposed by Weihrich (1982), to the Beira Interior.

The present paper is structured as follows. In the first section, a diagnosis of the competitive advantages of the Beira Interior, is made, by identifying the threats, and the opportunities that justify the implementation of strategic actions. Furthermore, the main forces and weaknesses are identified, taking into consideration in the strategic planning of new activities for the region in study. Later, a summary revision of the analytical tool used in the strategic diagnosis for the region: the Matrix TOWS; is made. In the second section, several strategic alternatives for the Beira Interior, are presented, aiming to reach the ideal strategic quadrant, which allows to explore the opportunities, incorporating the observed strengths. Finally, the conclusions of the present study and the guiding lines for future investigations are presented.

## **2. Diagnosis of the competitive advantages of the Beira Interior**

The competitive advantages developed by the regions should be subject of a rigour analysis by decision maker, in the sense of they be created conditions to make possible the implementation of strategic alternatives that seek the maintenance or the creation of those advantages.

The analysis of the diagnosis has beginning in the external environment. Specifically, with the identification of the Threats (T), that can be of immediate importance for the firm as that can evidence possible obstacles to the development of her activity. Simultaneously it should be identified the Opportunities (O). The Threats and Opportunities can be found in different areas, but it is advisable to observe more deeply, for the most common areas, such as economics, social, political and demographic factors, products and services, technology, market and competition. It is important to reinforce the idea that, the analysis of these factors should not say respect just to the present, but, and more important, to the future environment.

In this way, the internal environment is analyzed by their Strengths (S) and for their Weaknesses (W). These factors can be found in different areas, as for instance, the management and organization, the operations, the finances, the marketing and others. In the next section, an analysis of the external environment of the region in study: the Beira Interior region – Portugal, is made.

### **2.1. Threats and Opportunities**

Inside of the national and international competitive environment, the Beira Interior faces a set of threats and of opportunities, which is identifiable in the external environmental.

In the domain of the main threats susceptible to affect, negatively, the Beira Interior region, it should be enhanced in first place, the slowness in the characterization of the global plan of accessibilities. In this sense, the region, in study, presents serious competitive disadvantages, comparing with other Portuguese regions, and other European regions, that present a higher industrial, agricultural and tourist specialization, sustained by a network of international distribution extremely well structured.

The observance of a certain resistance to the initiatives of inter-business cooperation should be enhanced, as well as the difficulties in the inter-associative cooperation, which both contribute the inexistence of an adjusted regional strategy. This strategy should be assumed by the agents with effective responsibilities, at the level of the constitution of a new mix of cultures, conjoining the innovation, the investment in venture capital, and the entrepreneurship, supported by a cooperative effort of the local agents of decision. This way, it urges to overcome some practices of intra-regional competition observed in the past, as well as overcoming the difficulties in the inter-institutional cooperation (links between the national and the local entities).

In the entrepreneurial domain, the almost exclusive existence of small dimension units difficult the introduction of new management practices in their activities and the creation of new businesses. In the agricultural plan, the local producers have usually depended on European funds. This situation could be reverted, by recovering the regional and the traditional cultures properly articulated, through the creation of a new distribution mentality, and the by the promotion of cooperative movements among producers, using an umbrella brand, denominated: *Serra da Estrela*. These promotion activities should actuate on the so called distribution "hot points", for instance, in shopping centres, which are located in the main Portuguese and Spanish urban centres, and actuate also on the tourist and gastronomic routes.

In the present scenery of competition characterized by the intensification of the use of new technologies, the opportunities to use the Information and Communication Technologies (ICT), should be detected.

Additionally, the initiatives to develop the cooperation in the border area (including the Portuguese and the Spanish side), should be privileged, and the launching of structured initiatives among the two Iberian countries, as well as the construction of transport and communication networks, which facilitate both the access to the Spanish market, and to the remaining European markets.

The Beira Interior region has been coming to be object of attribution of supports of several nature, which should be expanded through of the creation of appreciable incentives (namely, at the digital and residential level of equipments) for the fixation of young qualified human resources.

The execution of these procedures will be possible, if a common strategy, contemplating the creation of a regional brand image, is going to be implemented, and also if a diversification of the supply of regional products, is going to be observed.

This strategic articulation can be obtained through the materialization of a Regional Technological Plan to promote for the Commission of Coordination of Development of the Region of the Centre (CCDRC), in the sense of stimulating the regional innovative potential and of providing the reinforcement of the reception of structural funds through the instruments of the European structural funds.

Consequently, the potentialities should be explored offered by elaboration of cooperation agreements among producers of the different Industrial Parks and of PARKURBIS - Park of Science and Technology (located in the region) that allows to structure a clusters network of small dimension, based on innovative production technologies, whose interacting checks a larger market power and allow to face with success the national and international competition.

## **2.2. Strengths and Weaknesses**

The competitiveness of Beira Interior is based, fundamentally, on the current strengths, that are originated by its geographical location, in the Iberian context and, above all, in their natural and environmental resources. Additionally, it should be enhanced their cultural and historical patrimonies, which can contribute, decisively, for a diversified offer of tourist products.

The Beira Interior region presents a territorial dynamics based in the tradition and in the Know-how obtained in the industrial, commercial and agricultural production. The existence of public graduate schools and of professional teaching, with connection to innovation centres and technology, it contributes to the reinforcement of the dynamics of the formative offer, as well as for the increase of the production capacity and of accomplishment with high quality patterns, in different industrial specializations.

It should still be enhanced the creation of centres, offices and units of investigation, in articulation with the needs of development of applied investigation to the social, agricultural and business context of the region. For the success of the policies for regional development, the importance of the local development associations should be enhanced, as well as of the regional associative structures representative. The existence of delegations, which assure the supply of specialized services, for supporting the firms and the local communities, should also be enhanced.

Besides, the productive tradition of this area is expressed for the existence in the region of a Park of Science and Technology (PARKURBIS), located in Covilhã (Portugal), which provide the possibility of establishing relationships among the economic agents, resulting possibly in the cooperative creation of industrial conglomerate with differentiated industrial specializations, but linked in network, in the Beira Interior region.

In this context, the creation of firms should be motivated (with coexistence of different dimensions) endowed with an innovative behaviour, that provides them a recognized presence in the national and in the international markets. The incubator of PARKURBIS can, in this field, to work as a catalyst of start-ups of technological base.

The Beira Interior presents a diversified supply of technological services and of innovation, as well as of equipments in the rows of the education and of the health, that contribute largely to the reinforcement of the local competences in the traditional clusters: Textile, and Agriculture, and Public Administration; namely, through the progressive fixation of qualified human resources. In the last two decades, with the expansion of the higher education and with to growing tourist promotion of the region in their several dimensions, it has been coming to operate more diversified services, which should be oriented, strategically, for the responsible entities, for the use of the natural conditions, and of the regional and traditional productions.

In the extent of the main weaknesses, it fits to detach the periphery location relatively to the great national urban centres, being conditioned by the weak accessibilities and for a transports network unable to give answer to the basic needs of the economic agents of this region.

Certain isolation and the inherent comparative disadvantages to the dislocations for the great urban centres of decision determine the observable difficulties in the attraction and in the fixation of young qualified boards in the region, what worsens the progressive aging of the local population. Add to this, the observance of a low education level, and of weak indexes of medium and superior qualifications, should be enhanced. This situation affects the low level of qualification of the available human resources, in the region.

The inexistence of a culture of inter-business cooperation reflects a certain level of individualism in institutional and entrepreneurial practices. It must also be stressed that the weak regional cohesion, has been worsened by the rivalry between the cities. This individualistic behaviour makes unfeasible a strategic actuation, which results in the inexistence of a main distribution centre, or of practices of unique promotion of the regional products, protected by a strong umbrella brand: *Serra da Estrela*.

In terms of industrial base, mono-industry situations are observed, which appear linked, habitually, to the traditional sectors, being allied to a reduced capacity of incubation of firms of innovative nature, to the present. In this sense, it urges to invert these situations, given that these also put serious difficulties to the reconverting of the activities of the support industries.

### **2.3. TOWS Matrix: Analytical Instrument of diagnosis**

The TOWS Matrix (presented in the Table 1) it is a conceptual model that allows realise systematic analyses that, facilitate the crossing among the strengths and weaknesses of a firm, region or nation and the correspondents opportunities and threats detected in the competition environment. In this analysis it is considered that the development of alternative strategies, wants is for a nation wants is for a region it requests a systematic analysis of the strengths and of the weaknesses of the respective system. It is noticing that this system operates inside of a large external environment, in which threats are detected, although they are also provides opportunities, which they should be faced, together, for the itself unit of analysis in study (Weihrich, 1982).

Table 1 - The Analytical Matrix of the Competitive Advantages - TOWS Matrix

<b>Internal Factors</b>	<b><u>Strengths (S)</u></b>	<b><u>Weaknesses (W)</u></b>
<b>External Factors</b>	Forces in the areas of Administration, Production, Finances, Marketing, R&D, Innovation, Entrepreneurship and Engineering.	Weaknesses in the areas described in the quadrant corresponding to the Internal Forces.
<b><u>Opportunities (O)</u></b>	<b><u>Strategy S-O: Maxi-Maxi</u></b>	<b><u>Strategy W-O: Mini-Maxi</u></b>
The present and future economics conditions, political and social changes, new products or services, and technological changes.	Ideal strategy that contemplates the use of the Strengths, in sense of removing advantages of the Opportunities.	Strategy of development to overcome the Weaknesses, in order to explore the Opportunities.
<b><u>Threats (T)</u></b>	<b><u>Strategy S-T: Maxi-Mini</u></b>	<b><u>Strategy W-T: Mini-Mini</u></b>
Competition, shortage of energetic sources, and Threats presents in the areas described in the quadrant corresponding to the Opportunities.	Strategy that concerns to the use of the Strength, to face with success the Threats.	Strategy that contemplates the formation of Alliances, Agreements of Cooperation or activities clearance sale.

Source: Adapted of Wehrich, H.; Koontz, H. (1994: 175)

The four referenced factors, previously, can constitute the base of four alternative strategies to undertake for a nation or for a region (Wehrich, 1982). See each one of them:

i.) The S-O Strategy S-O (or Maxi-Maxi): This strategy constitutes the most desirable situation, because it bases on the exploration of the internal strengths, to remove advantages of the present opportunities in the external environment (in the case of the Beira Interior region, main objective should be to move of other positions in the matrix for this situation).

ii.) The Strategy S-T (or Maxi-mini): This strategy bases on the organization of the strengths to work with the present Threats in the external environment, with the objective of to maximize the first ones and to minimize the last ones (in the case of the Beira Interior region, this can use their strengths, in terms of natural resources and of infrastructures, in the fields technological, financial, administrative and promotional, to face the derived threats of the competitive environment).

iii.) The Strategy W-O (or Mini-Maxi): This strategy that constitutes a development plan to convert the weaknesses in strengths , given the present opportunities in the external environment (in the case of the Beira Interior region, this should develop the areas in that it presents larger weaknesses, proceeding to the construction of basic infrastructures, to the recovery of his/her historical and environmental patrimony, to the technology acquisition, or to the recruitment and the fixation of qualified human resources, that allow to explore the present opportunities in the external environment).

iv.) The Strategy W-T (or, Mini-mini): This strategy intends to minimize the threats and the weaknesses (in the case of the Beira Interior region, it requests that this celebrates strategic alliances and partnerships with other areas or rural centres, in the sense of guaranteeing the obtaining of operational synergies).

It is of noticing that internal and external environments are dynamic, being subject to several transformations; in this sense, the factors: strengths, weaknesses, opportunities and threats; presented at a certain TOWS matrix are regarding particular moments in the time. Consequently, the decision maker should prepare several TOWS matrix, in different moments of the time, taking in consideration a sequential analysis, including TOWS matrix regarding the past, to the present and the different moments (or sceneries) futures (Weihrich and Koontz, 1994).

#### **2.4. An Application of the TOWS Matrix to the region of the Beira Interior (Portugal)**

In order to make a synthesis of the diagnosis relative to the matching between the internal factors, and the external factors of the region in study, a TOWS Matrix is designed (Table 2), incorporating the present competitive advantages and the industrial specializations of the region in study: the Beira Interior.

**Table 2 – The TOWS Matrix of the Beira Interior (Portugal)**

<p><b>External Factors</b></p>	<p><b>Strengths (S)</b></p> <ul style="list-style-type: none"> <li>▶ Geographical location in the Iberian context.</li> <li>▶ Natural and environmental resources.</li> <li>▶ Cultural and historical patrimony.</li> <li>▶ Tradition and know-how in the agricultural and industrial production.</li> <li>▶ Existence of professional and higher education institutions with connections to the main innovation and technology units.</li> <li>▶ Existence of Research and Development (R&amp;D) units.</li> <li>▶ Networks of regional development agencies.</li> <li>▶ Existence of Technological and Industrial Parks with specific industrial specializations.</li> <li>▶ Mechanisms of tourist promotion, through organized actions of the Tourism Region of <i>Serra da Estrela</i>.</li> <li>▶ Progressive fixation of highly qualified human resources.</li> <li>▶ New supply of services, which are based on the region.</li> </ul>	<p><b>Weaknesses (W)</b></p> <ul style="list-style-type: none"> <li>▶ Location relative to the big Portuguese cities.</li> <li>▶ Transports network (highroads, railroads, and airport).</li> <li>▶ Lack of coordination between institutional practices.</li> <li>▶ Rivalry between the most important cities.</li> <li>▶ Increasing of the older population.</li> <li>▶ Low level of schooling and weak indices of medium and high qualifications.</li> <li>▶ Reduced versatility, and difficulties in reconvertng human resources.</li> <li>▶ Inexistence of a culture of inter-business cooperation.</li> <li>▶ Subordination to exterior units of distribution which are located faraway from the region.</li> <li>▶ Inexistence of promotion practices of the regional products, using an umbrella trade mark.</li> <li>▶ Limited capacity for incubating new innovative firms.</li> </ul>
<p><b>Opportunities (O)</b></p> <ul style="list-style-type: none"> <li>▶ Cooperation between Portugal and Spain.</li> <li>▶ Construction of new communication facilities (national and international highroads).</li> <li>▶ Fixation of highly qualified human resources.</li> <li>▶ Demand for high quality regional products.</li> <li>▶ Creation of a regional brand image.</li> <li>▶ Diversification and integration of the tourism supply.</li> <li>▶ Dissemination of the use of Information and Communication Technologies (ICT).</li> <li>▶ Promotion of innovating and entrepreneurial activities.</li> <li>▶ Incubation of new companies in the scope of the Science and Technology Park: PARKURBIS.</li> <li>▶ Design and implementation of a Regional Technological Plan.</li> <li>▶ Use of European structural funds, by arranging cooperative networks between Portugal and Spain, in the education and medical assistance areas.</li> <li>▶ Reinforcement of the partnerships between the public and the private sectors.</li> <li>▶ Creation of the Medicine Faculty.</li> <li>▶ Attraction of investments made by the immigrants that return to the region.</li> </ul>	<p><b>S-O Strategies:</b> <b>Maxi-Maxi</b></p> <ul style="list-style-type: none"> <li>▶ Strengthen of the distribution channels of agricultural and craft products.</li> <li>▶ Incentives for the production of craft articles and others.</li> <li>▶ Preparation and execution of a Strategic Plan for the Regional Development (SPRD).</li> </ul>	<p><b>W-O Strategies:</b> <b>Mini-Maxi</b><sup>1</sup></p> <ul style="list-style-type: none"> <li>▶ Creation of the Cheeses and Wines Route of the Beira Interior, in articulation with the network of historical villages.</li> <li>▶ Creation of sporting infrastructures and of diverse trails in spaces of the NATURA Net and others.</li> <li>▶ Preservation of the patrimony and of the environment of the rural villages.</li> <li>▶ Incentives for supporting the traditional activities, with special incidence in the activities developed by women and unemployed (subject to a professional conversion).</li> <li>▶ Registry of the local traditional activities, and of the endogenous resources.</li> <li>▶ E-learning project, based in wireless networks.</li> <li>▶ SAMURAI Project – Multimedia Application in the Hospitals, Universities, and Cities.</li> <li>▶ INPROLAN Project – Development of new products and of new manufacturing processes in the woollen and clothing industries.</li> <li>▶ Development of the Laboratory of Communication and Contents online.</li> <li>▶ SEMENTE Project – Development of contents for the health and medical assistance areas.</li> </ul>
<p><b>Threats (T)</b></p> <ul style="list-style-type: none"> <li>▶ Slowness in the finishing of the general accessibilities plan.</li> <li>▶ Industrial, agricultural and tourist specialization, of the new members of the EU.</li> <li>▶ Resistance to the initiatives for inter-business cooperation.</li> <li>▶ Difficulty of adaptation of the small firms to R&amp;D initiatives.</li> <li>▶ Difficulties in the institutional cooperation.</li> <li>▶ Insufficient levels of regional mobilization.</li> <li>▶ Difficulties in the retention of qualified human resources, in specific areas.</li> <li>▶ Absence of an innovative capacity of the agricultural regional producers.</li> </ul>	<p><b>S-T Strategies:</b> <b>Maxi-Mini</b></p> <ul style="list-style-type: none"> <li>▶ Creation of a Unit for supporting Innovation and Entrepreneurship, in order to create an interface between the entrepreneurs and the European Programs and Funds.</li> <li>▶ Mini-MBA focused on the formation of intermediate chiefs, functioning in the entrepreneurial environment.</li> <li>▶ Rehabilitation of the edified urban patrimony.</li> </ul>	<p><b>W-T Strategies:</b> <b>Mini-Mini</b></p> <ul style="list-style-type: none"> <li>▶ Participation and organization of national and international meetings of commercial and industrial activities.</li> </ul>

<sup>1</sup> In the region in study, the W-O Strategies correspond to the dominant development quadrant.

### 3. The Strategic Alternatives for the Beira Interior

In this section, a set of strategic alternatives for the region in study, is proposed (Table 3), in order to guarantee a successful transition between the dominant development quadrant: Mini-Maxi (which is relative to the present strategic diagnosis scenery, Table 2); and the most desirable quadrant, in terms of the future positioning of the region in study, that is, the Maxi-Maxi.

**Table 3 – Quadrants of Strategic Alternatives for the Beira Interior**

<p style="text-align: center;"><b><u>S-O Strategies:</u></b> <b><u>Maxi-Maxi</u></b></p> <ul style="list-style-type: none"> <li>▶ Creation of an umbrella brand: Serra da Estrela; vertical and applicable to the ranges of related products.</li> <li>▶ Creation of a unit for certifying the quality of the regional products, in articulation with the University of Beira Interior (UBI).</li> <li>▶ Implementation of a strategy for the distribution and the commercialization of agricultural, craft products, and of animal origin.</li> <li>▶ Promotion of a formal Program for Entrepreneurship and Innovation.</li> <li>▶ Creation of an annual Prize for the most Innovative Firm in the Beira Interior.</li> <li>▶ Creation of an annual Prize the Best Business Plan (BBP).</li> <li>▶ Incentives for new entrepreneurial initiatives (attribution of merit prizes, and of scholarship grants; and abolition of the municipal taxes).</li> <li>▶ Creation of MBA's in the areas of Entrepreneurship and creation of Technological Businesses.</li> <li>▶ Venture Capital Societies for developing innovative activities (public/private co-owners).</li> </ul>	<p style="text-align: center;"><b><u>W-O Strategies:</u></b> <b><u>Mini-Maxi</u></b></p> <ul style="list-style-type: none"> <li>▶ Network of Multimedia Access Points located in the rural centres, in connection with the Libraries, and the Local Public Authorities and Agencies.</li> <li>▶ Medical assistance network and payments consulting system, using a telematic channel, which should be based on cooperative networks to be established between the Portuguese and the Spanish Centres.</li> <li>▶ Creation of an International Airport, located in the city of Covilhã, where is also located the UBI, and re-establishment of the air connections (passengers and merchandise).</li> <li>▶ Creation of a Reservation Central for Rural Tourism Units and connected activities.</li> </ul>
<p style="text-align: center;"><b><u>S-T Strategies:</u></b> <b><u>Maxi-Mini</u></b></p> <ul style="list-style-type: none"> <li>▶ Creation of an E- marketplace for trading regional products.</li> <li>▶ Creation of communication networks between rural and urban centres.</li> <li>▶ Preventive plan of utilization of the aircraft in forest fires.</li> </ul>	<p style="text-align: center;"><b><u>W-T Strategies:</u></b> <b><u>Mini-Mini</u></b></p> <ul style="list-style-type: none"> <li>▶ Organization of a Network of Knowledge Cities, covering Portuguese and Spanish cities located near the border area of both countries.</li> <li>▶ Recovering of the Wool Route, in a digital format.</li> </ul>

The substantial improvement of the performance of the region in study, should be based on the modification of the conducts of their agricultural and industrial producers, and of their tourist operators (with big and small dimension), in order to reinforce the internal strengths, as well as, to create the maximum added value based on the profitable use of the identified opportunities in the external environment.

In order to reach an ideal scenery in the region in study, the consecution of a set of strategic alternatives should be operated through the previous use of the analytic tool: the TOWS matrix. This must be assured through the implementation of a strategic plan, which has to embrace the local institutional agents, covering three main directives: the entrepreneurship, the innovation, and the territorial competitiveness.

These three main directives aim to reinforce the basic conditions for the development of the entrepreneurial initiative; to diversify the agricultural and industrial specializations; and to strengthen the competitive advantages which were accumulated, during the secular development of traditional specializations, that were based on the exploitation of the natural resources.

In what concerns to the first directive (entrepreneurship), the promotion of a formal entrepreneurship program is proposed, in articulation with the creation of an annual prize for the best business plan. These kind of formal measures should be accompanied by the reinforcement of the courses offer, in this specific field, namely, through the launching of post graduation programs (for example, MBA's) in two strategic areas: entrepreneurship, and creation of technological businesses; eliminating the sunk costs associated with the municipal taxes, and also by offering incentives to new entrepreneurial initiatives, making use of merit prizes, and of scholarship grants, in order to attract and maintain the best young students, in the region, by offering them the possibility to create their own businesses.

In relation to the second directive, in order create a reactive mechanism focused on the development of new business initiatives, a set of incentives oriented to innovation practices, should be promoted, through the creation of venture capital societies, the promotion of public/private co-owners, the development of a unit for certifying the quality of the regional products, in articulation with the local University, and also by promoting the creation of an annual prize for the most innovative enterprise in the Beira Interior region.

Relative to the third directive (territorial competitiveness), in case of no promotion of the territorial competitiveness of the region in study, all the strategic alternatives previously proposed can result in an set of inefficient and isolated measures. For this reason, this promotion should be based on the design of a distribution global strategy, aiming to assure the commercialization of agricultural and craft products, and of products of animal origin, properly certified and identified by the umbrella brand with the denomination: Serra da Estrela; which should be vertical and applicable to related products.

Nevertheless, the obstacles originated by the natural conditions, and by the peripheral location of the region, in study, should be overcome. In this way, it is indispensable to perform a deliberate bet in the network connection between the urban centres, and the rural ones, in order to promote inter-regional networks of communication, which are intended as a privileged way of reinforcing, in a technological mode, the existent competitive advantages of the region, in what concerns to the patrimony, the culture, the scientific research, the education, and the established industrial and agricultural productions. In this sense, the promotion of the region in an online Web base will contribute, not only for the reinforcement of the comparative advantages, but also for the creation of more cooperative institutional networks, which should embrace the different decision makers of the responsible and governmental institutions, at the regional level.

#### **4. Conclusions**

From the application of the analytical tool: TOWS Matrix; to Beira Interior region (Portugal), and according to the strategic diagnosis now performed, a set of critical factors was identified, as far as the internal level, as the external level, which yielded an articulated proposal, including strategic alternatives for developing the region, in a sustainable basis.

In the execution of this strategic diagnosis, a dominant quadrant the W-O strategies: Mini-Maxi; was identified. It must be also highlighted that this quadrant is being characterized, firstly, in the tourism area, by the creation of the route of the cheeses and wines of the Beira Interior, in articulation with the network of historical villages; by the edification of sporting infrastructures, including diverse trails in spaces of the NATURA Net; by the preservation of the edified patrimony, and also by the preservation of the environment in the rural villages. Secondly, in the area of the traditional activities, a set of incentives for revitalizing the traditional activities, with a special incidence in the activities developed by women and by unemployed, has been supported. Furthermore, the registry of the referred local traditional activities, and of the local and endogenous resources, was made. Thirdly, in the area of the Information and Communication Technologies (ICT), the local University has assumed a central role in the promotion of a real development lever for the Beira Interior, through the implementation of innovative projects, such as: the E-learning Project, based in wireless communication networks; the SAMURAI Project, with multimedia applications in hospitals, universities, and urban centres; the INPROLAN Project, aiming the development of new products and of new manufacturing processes for the woollen and clothing industries; and the SEMENTE Project, which is focused on the development of new contents in the health, and the medical assistance areas.

In order to assure a better competitive positioning for the region in study, and taking into consideration the present strategic scenery of development of the region, the transition from the dominant quadrant (Mini-Maxi), in direction to the most desirable quadrant (Maxi-Maxi), is also proposed.

For the achievement of the referred competitive positioning, a set of focused actions are proposed, in two critical areas: (i) the traditional activities and the tourism; (ii) the entrepreneurship and the innovation.

For the first critical area, an umbrella brand called: Serra da Estrela, should be promoted; a unit for certifying the quality of the regional products, should be created, in articulation with the University of the Beira Interior (UBI); and a strategy for the distribution and the commercialization of the regional products should be designed, and, subsequently, should be implemented.

In what concerns to the second critical area, a formal program for entrepreneurship and innovation should be promoted; an annual prize for the most innovative enterprise, and for the best business plan, should be created; and the risk capital societies for supporting innovative initiatives, should be also promoted, by evolving public and private entities.

Additionally, a set of specific incentives for developing new entrepreneurial initiatives (for example, the merit prizes, the scholarships grants, and the abolition of municipal taxes), should be promoted by the responsible entities, and the launching of Mini MBA's directed for the creation of technological businesses, should be assured by the University.

Finally, in terms of future research, it would be interesting to apply the same analytical tool to other regions with a similar development profile, in order to perform comparative analyses, taking into consideration the benchmark now obtained. This comparative analysis could contribute for the calibration of the analytic tool that was used in the present article, in the generic context of the regional development of the nations. In this sense, it will be possible to formulate proposals of strategic alternatives, taking into consideration an effective articulation between the strategic diagnosis of the present situation of the unit of analysis, and the future sceneries of regional development.

## REFERENCES

- BURNES, B. (1997), "Organizational Choice and Organizational Change", *Management Decision*, Vol. 35, Nº 10, p. 753-759.
- CHANDLER, G.; HANKS, S. (1994), Market Attractiveness, Resource-Based Capabilities, Venture Strategies and Venture Performance, *Journal of Business Venturing*, Vol. 9, p. 331-349.
- GRANT, R. M. (1991), "The Resources-Based Theory of Competitive Advantage: Implications for Strategy Formulation", *California Management Review*, Spring, p. 114-135.
- GUEDES, P.; LEITÃO, J.; SILVA, A. (2002), "Desenvolvimento rural e as redes de conhecimento", *Revista Portuguesa e Brasileira de Gestão*, FGV - INDEG/ISCTE, Volume 1, N.º2, Julho/Setembro de 2002, p. 79 - 91.
- HOWELLS, J.; NEDEVA, M. (2003): "The International Dimension to Industry-Academic Links", *International Journal of Technology Management*, Vol.25 (1/2), p. 5-17.
- MILLER, D.; SHAMSIE, J. (1996), "The Resources-Based View of the Firm in Two Environments: The Hollywood Film Studios From 1936 to 1965", *Academy of Management Journal*, Vol. 39, Nº3, p. 519-543.
- PETERAF, M. (1993), "The Cornerstones of Competitive Advantage: A Resource-Based View", *Strategic Management Journal*, Vol. 14, p. 179-191.
- PORTER, M. (1985), *Competitive Advantage*, New York, NY: Free Press.
- PORTER, M. (1990), *The Competitive Advantage of Nations*; The Macmillan Press Lda, London;
- PORTER, M. (1998), "Clusters and The New Economics of Competition", *Harvard Business Review*, November - December, 1998, p. 77 - 89.

WEIHRICH, H. (1982), "The TOWS Matrix - A Tool for Situational Analysis", *Long Range Planning*, Vol. 15, N.º 2, April 1982, Pergamon Press Ltd, p. 54 - 66.

WEIHRICH, H.; KOONTZ, H. (1994), *Management: A Global Perspective*, McGraw-Hill, 10th Edition, New York.

WEIHRICH, H. (1999), "Analysing the competitive Advantages and Disadvantages of Germany with the TOWS Matrix - an alternative to Porter's Model", *European Business Review*, Volume 99 - Number 1 - 1999, MCB University Press, p. 9 - 22.