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DIGITAL CHALLENGES FOR THE SMALL AND MEDIUM ENTERPRISES OF THE TEXTILE AND CLOTHING INDUSTRY IN PORTUGAL

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Abstract: Nowadays of increasing functioning of network competitors, the Portuguese Small and Medium Enterprises (SME) of the Textile and Clothing Industry are facing new digital challenges. In order to strengthen their market power and reduce their dependence on foreign subcontractors, they need to create a brand image. Within this new digital and interactive context, they must interact with their consumers and take full advantage of the opportunities provided by new communication and media networks, by implementing Intranets and Extranets as privileged systems of external communication with clients, suppliers, and partners in a competitive environment. This essay analyses the competitive advantages and TOWS Matrix's Model is used for tracing dominant strategic alternatives and convenient recommendations for managers and public administrators taking into consideration the operating changes in the new economic platform, namely Internet. The Portuguese Government is committed to encouraging entrepreneurship and acts as a unifying agent, working with SME to pursue the creation of a selective set of Portuguese brands, which might better, represent products labelled "Made in Portugal". Furthermore, the Textile and Clothing Industry should be promoted using incentives to encourage SME production, and especially where innovative products are concerned, in connection with the main suppliers of raw materials, in order to encourage Cluster Networks and Technological Poles. Also relations should be encouraged by the construction of a vertical chain sheltered by a selective set of Portuguese brands supported and promoted by responsible national agents. This is a *sine qua non* condition to create an International Store Chain, which could offer the SME products the needed visibility.

Key Words: Strategic Planning, Textile and Clothing, TOWS Matrix.

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1. INTRODUCTION

During the 80s, there was a gradual stabilization of the Portuguese political process (*post 25th April* period), which culminated with Portugal's adhesion to the European Community, in 1986.

This fact brought significant changes to Portuguese External Policy, and there was an effort to adapt to gradual market liberalization, based on the logic of reciprocity imposed by the European External Trade Policy, which assumes that the development of trade and service is, itself, a factor of growth and progress that benefits all agents in the world trade system.

The GATT's¹ revision, in 1993, on the one hand, has opened up the frontiers of European markets to products supplied at lower prices by third world countries and, on the other hand, imposed the necessity of a faster and deeper reorganization of the fabric of Portuguese production.

In spite of the serious crises faced by the Portuguese Textile and Clothing SME during the last few decades, this industry achieved considerable acknowledgment at several levels, such as production, the relationship of quality to price, flexibility, delivery terms, and service provision to subcontractors. Thus, has achieved a solid and prestigious image, which seems to have contributed to a movement of return from some international clients.

The Competitive advantages achieved by Portuguese Textile and Clothing SME, however, must be analysed by decision makers in order to create favourable conditions to the development of strategic alternatives with a view to maintaining or creating such advantages.

2. THE DIGITAL CHALLENGE

Nowadays, it is difficult to determine the actual frontiers between industries and also to separate industrial production from specific services. There is clear evidence of a change in production organization, i.e. enterprises tend to assert themselves less as a unit of transformation, and more as a net of specialized units (Freitas, 1997).

In the present context of (almost) total market liberalization, strategies developed by the main European customers reveal that more important than the control of production is the control of the market itself (EP, 1999).

Optimistically, it is to be noticed that it is time for SME to assert themselves with national brands within the inner European market by exploiting experience resulting from joint projects with leading international brands.

The Portuguese Textile and Clothing SME must look forward for different ways of making business, namely, by interacting with other partners, and by optimising the value chain and the consumption chain, through the participation on e-marketplaces.

¹ General Agreement on Tariffs and Trade.

Whereas, the SME should develop strategies covering the B2C² and B2B³ areas, which could promote new business models, and attract different agents such as: producers and consumers, in both sides of the market.

The bet on e-marketplaces, which could conjoin in same electronic market: cotton suppliers, woollen producers, and stores, may eliminate the transaction costs associated with the participation of intermediary agents.

Therefore, the Portuguese Textile and Clothing SME may use the same electronic platform and reach this way, two kinds of customers:

1st The Big Customer, that owns an international brand image (preferably in the modality of Private Label⁴);

2nd The Interactive Consumer (internationally domained).

The birth of strategic alliances between SME with digital basis, that should extol the value integration through the collective participation of different organizations in searching the same goal, may be considered as a form of rising the connection value for a producer and consumer network, which value depends on the number of users of that electronic place (Tapscott et al, 2000).

These strategic alliances, on the one hand, should give to the consumers a personalized settle of services, and on the other hand, should promote Vertical Portals (Generic E-Marketplaces) or Horizontal Portals (Specialized E-Marketplaces), which may contribute for the strengthening of SME' clusters.

Furthermore, the SME have to capitalize the potential synergies that may be obtained through the integration of services, which may contribute for the consumer's loyalty to the Portuguese Brands.

² Business to Consumer.

³ Business to Business.

⁴ Outsourcing activities where the customer gives an active role to the firm that executes the request, by choosing the colours, materials, and design of customer's collection.

3. DIAGNOSIS OF THE STRATEGIC ALTERNATIVES TO PORTUGUESE TEXTILE AND CLOTHING SME

3.1. ANALYTIC TOOL: TOWS MATRIX

In order to analyse the Portuguese Textile and Clothing SME' strategic conducts, an alternative tool proposed by Wehrich (1982) has been used and it consists of the construction of the TOWS Matrix⁵, resorting to the following strategic planning concepts: Threats (T), Opportunities (O), Weaknesses (W) and Strengths (S).

The TOWS Matrix is a conceptual model used to make systematic analyses, which contribute to an easier match of External Opportunities and Threats with Internal Strengths and Weaknesses. This can be used for a Nation, an Industry, an Enterprise or a Personal Career (Wehrich, 1982).

Therefore, the development of strategic alternatives requires systematic analysis of the respective system's Weaknesses and Strengths, operating in a large external environment, which represents Threats but also Opportunities, to the system itself (Wehrich, 1982).

The four factors mentioned above may become the basis of four strategic alternatives to be undertaken by a Nation, an Industry, an Enterprise or a Personal Career⁶ (Wehrich, 1982). These strategies are:

i.) The S-O Strategy (or Maxi-Maxi), which represents the most desirable situation because it is based on the exploitation of Internal Strengths to take advantage of the Opportunities presented by the External Environment (in case we consider an enterprise, its main objective would be to shift from other positions in the matrix towards this situation);

ii.) The S-T Strategy (or Maxi-Mini), which relies on the organization of Strengths to deal with the Threats presented by the External Environment, and the objective is to maximize the former and minimize the latter (if we consider an enterprise, its Strengths related with technological, economic, management and promotional fields, may be used to face Threats which are due to the introduction of a new product by a competitor);

iii.) The W-O Strategy (or Mini-Maxi), which forms a development plan with the intention of converting Weaknesses into Strengths, considering the existing Opportunities in the External Environment (in case of considering an enterprise, the fields in which it has more Weaknesses should be developed, through the acquisition of technology or the recruiting of qualified human resources, in order to take full advantage of Opportunities);

⁵ Note that TOWS Matrix's designation starts with Threats because strategic planning actions are often implemented in order to face an arising problem, an announced crisis, or Threat (Wehrich and Koontz, 1994).

⁶ For further information, consult study applications of the TOWS Matrix's Model to the Automobile Industry, including Volkswagen and Winnebago Industries Inc. (Wehrich, 1982), and also to German Economy (Wehrich, 1999).

iv.) The W-T Strategy (or Mini-Mini), which intends to minimize the External Threats and the Internal Weaknesses (in case we consider an enterprise, this strategy requires a Joint-Venture, a reduction of the enterprises' capital, or its liquidation).

It is important to stress that internal and external environments are dynamic elements, since they are constantly in change. Thus, the factors (Strengths, Weaknesses, Opportunities and Threats) represented in a TOWS Matrix relate to a particular moment in time (Wehrich and Koontz, 1994).

Therefore, the *strategor* must draw several TOWS Matrices, showing different moments of time, considering a sequential analysis, including TOWS Matrices which show the past, present and different moments of the future (Wehrich and Koontz, 1994).

3.2. INTERNAL STRENGTHS AND WEAKNESSES

In this section Portuguese Textile and Clothing SME are analysed in order to briefly identify their main Strengths and Weaknesses.

The Portuguese Textile and Clothing SME competitiveness lays in the tripod formed by price, quality and delivery terms. Together, these three basic Strengths offer a set of products and services endowed with an attractive quality versus price relationship (Sereno, Martins and Cavalheiro, 1998).

Portuguese Textile and Clothing SME' main Strengths consist fundamentally in the flexibility of production lines, which provide a fast capacity of response, very appreciated by international subcontractors (Sendin, 1998).

Nowadays, delivery terms are becoming increasingly reduced (lower than a month) and the number of smaller orders has increased. These two factors explain the reason why leading international subcontractors have preferences, which usually target on call responses by Portuguese SME.

Furthermore, we shall not forget the role played by moderate salary costs together with a complete, organized and articulated textile industry, which has a tradition and acquired knowledge on textile manufacturing (Sendin, 1998).

Moreover, the concentration of certain enterprises (Textile and Clothing Clusters) together with their know-how may create a set of synergies, which can be improved in order to reinforce the competitive advantages associated with the traditional Portuguese industries (Porter, 1998).

Another important point to mention is the existence of the cultural factor, often disregarded, but which represents a potential Strength and this is the fact that Portuguese Textile and Clothing managers have a very special way of dealing with customers who share their culture. This allows them to beat Asiatic competition within this ambit.

In what concerns Weaknesses, the strong sell dependence relatively European Markets (Germany, France, United Kingdom, Italy and Spain), the inexistence of supportive internal trade structures (particularly, for exports), and the absence of delegation in final market product management responsibilities among distributors, are all to be considered. The latter may lead to certain dissociation between enterprises and consumer markets (Raposo, 1994).

The Portuguese Textile and Clothing SME have revealed weak efforts regarding product innovation and development and have implemented inefficient strategies. This reflects a lack of training and information on the part of working staff and may inhibit them envisaging a place in the international context (GEPE, 1995).

It is also important to underline the dispersion of entrepreneurial associations in the Portuguese Textile and Clothing Industry. This fact represents a significant Weakness, since there is no evidence of interests working as pressure groups and acting in harmony with national and international entities (GEPE, 1995).

In Portugal, the evolution of favourable conditions for the Textile and Clothing Industry is conditioned by two main issues representing actual Weaknesses. On the one hand, the low level of qualification in human resources needs to be overcome by means of well planned training programmes. On the other hand, so far, the National Capital Market has no participation in Textile and Clothing Enterprises' social capital (Freitas, 1997).

The Textile and Clothing SME are still behind in the field of competitiveness regarding immaterial factors such as, for instance, marketing and elements such as design and fashion (Freitas, 1997).

There are still structural disequilibria in the relation between variables, such as employment and Added Value, reflecting the necessity of raising productivity levels by introducing improvements to quality in the production process (Freitas, 1997).

The absence of internationally known Portuguese brands, along with the existence of strong deficiencies in product conception and marketing courses, and also with the lack of SME' participation in international product distribution, inevitably contributes to a lack of control of distribution channels (Sendin, 1998).

According to Sereno et al (1998), nearly 60% of Portuguese SME work to foreign subcontractors. This contributes to a strong dependence on customers' decisions, taking into consideration that customers may shift the production to other country where artisanal labour is cheaper.

Thus, this Industry still shows an excessive dependence on passive subcontracting and often presents lower quality products, reflecting the difficulty of facing the competition of the Asiatic and East European countries (Sendin, 1998).

3.3. EXTERNAL OPPORTUNITIES AND THREATS

The Portuguese Textile and Clothing SME characterized by the Strengths and Weaknesses described above, face a range of Opportunities and Threats existing in the international market.

In the context of international market liberalization, arising Opportunities include flexibility of the production process (which allows the achievement of scope economies), development of new textile product application (through Research and Development), and improvement of potential external economies resulting from inter-enterprise cooperation (Sendin, 1998).

This emphasis on Research and Development (R&D) is related to issues of design and quality, implying a development in process of innovation in the ambit of conception and creation of new fabrics and models (Serenio et al, 1998)

Nevertheless, it should be accompanied by establishing new brand marks for textile products, by means of the implementation of national and international advertising campaigns. This would contribute to familiarize end consumers with those brands.

Portuguese Textile and Clothing SME have an excellent opportunity for receiving the positive effects of the international promotion of a global image of the industry, by means of concerted actions within official entities and Associations of each industry, in order to reach unexplored potential markets (Sendin, 1998).

The introduction of the Euro also represents a unique Opportunity for Portuguese Textile and Clothing SME, which may benefit from the elimination of exchange risk and conversion costs. Furthermore, it will be possible to proceed to modernization and adjustment of equipment, as well as to review managerial and organization processes, by implementing training programmes in tune with the new international economic and financial reality.

There is also a range of Opportunities based on training, especially the development of training programmes and recycling of available human resources (at different levels of hierarchy: operators, intermediate and superior leadership), favouring new methods and internal reorganizing projects within industries.

Moreover, the performance of Portuguese Textile and Clothing SME can be improved by integrating new personnel with high level technical training and promoting solid links of cooperation and research within scientific bodies, which would stimulate the creation of Technological Parks working as a pole of synergy for economic agents.

It is also to be noticed that these industries should turn into good account the wide range of Opportunities resulting from the use of Internet as a new economic platform, since markets will become endowed with unlimited dimension. Thus it will be possible to reach markets that otherwise would not be achieved.

The main Threats faced by Portuguese Textile and Clothing SME, are, on the one hand, competition from countries with lower salary costs (Asiatic and East Europe countries) in lower quality markets, and, on the other hand, competition from industrialized countries in the middle and high segments of the market (Sendin, 1998).

Within the international scenario of global economic activities and relations, there is a new Threat expressed by the increasing development of outsourcing activities in some Mediterranean and European countries. Thus, since Portuguese SME have lost competitiveness in low quality segments due to the low prices of those countries, they are now forced to review their strategies and turn to higher quality segments of the market.

3.4. APPLICATION OF THE TOWS MATRIX TO PORTUGUESE TEXTILE AND CLOTHING SME

After proceeding to a structural analysis of the Portuguese Textile and Clothing SME, an application of the TOWS Matrix is now presented, in order to systematize the Strengths, Weaknesses, Opportunities and Threats, identified with these industries' enterprises, and to suggest an implementation of distinct strategic alternatives⁷, considering the determinating factors, which characterize the market's basic condition and the market structure itself.

Thus, a substantial improvement of these Textile and Clothing SME implies a change in behaviour in order to improve and solidify its Strengths, as well as to overcome its Weaknesses.

Therefore, promotional strategies in the ambit of the Digital Economy should be implemented, in order to take advantage of global Opportunities and successfully surpass Threats arising from direct European and Asiatic competitors (Tapscott, 1995).

Moreover, SME must be aware of current changes in consumers' profile in terms of specific features, comfort, and supplied products and services, since this represents the existence of a new type of consumer, otherwise known as an interactive consumer.

This interactive consumer belongs to 'Net Generation' and demands more personalised products and services, as well as the opportunity of trying out before buying or before becoming loyal to a brand. This new consumer also privileges enterprises, which have the capacity of correcting errors in a responsible and immediate way (Tapscott, 1995).

⁷ Suggested strategic conducts in the TOWS Matrix (Table III.A) are marked with the symbol: .

Table III.A. -TOWS Matrix and Strategic Alternatives for

Portuguese Textile and Clothing SME

<p style="text-align: center;">Internal Factors</p> <p style="text-align: center;">External Factors</p>	<p style="text-align: center;"><u>Strengths (S)</u></p> <p>⇒ Geographic and Cultural Proximity relatively to European Markets (Sendin, 1998); ⇒ Spatial Enterprises Concentration (idem); ⇒ Flexibility on Production Process (idem); ⇒ Quick Ordering Response (idem); ⇒ Moderate Salary Costs (idem); ⇒ Complete, Organized, and Articulated Textile Rank (idem); ⇒ Know-How and Tradition, allied to Technical Capacity and Design (Fiel, 1998); ⇒ Offering of High Quality Products, with an Attractive Price (Serenio et al, 1998); ⇒ Singular Relation between Portuguese Entrepreneurs and International Customers (idem).</p>	<p style="text-align: center;"><u>Weaknesses (W)</u></p> <p>⇒ Dependence on passive subcontracting, relatively to worldwide known brand (Sendin, 1998); ⇒ Inexistence of national brands (idem); ⇒ Lacks in product conception and marketing staged of production (idem); ⇒ Low strategic management capacity (idem); ⇒ Low participation of Enterprises in its product international distribution (idem); ⇒ Low hand labour qualification level (idem); ⇒ Existence of Low Quality Product Scopes (idem); ⇒ Evolution of National Capital Market (Freitas, 1997); ⇒ Dispersion of Enterprise Associations (GEPE, 1995) ⇒ Strong Dependence on European Markets (Raposo, 1994); ⇒ Absence of Internal Structures to support Transactions (idem); ⇒ Dissociation between Enterprises and largest consumer markets (idem).</p>
<p style="text-align: center;"><u>Opportunities (O)</u></p> <p>⇒ Development of New Textile Applications (Sendin, 1998); ⇒ Unexplored Potential Markets (idem); ⇒ Flexibility of Production Lines (idem); ⇒ External Economies created by Entrepreneurship (idem); ⇒ Creation and promotion of a Brand Image (idem); ⇒ Globalisation (idem); ⇒ Innovation on Conception of Tissues (Assert in R&D) (Serenio et al, 1998); ⇒ Training Programs (idem); ⇒ Cooperation between Scientific Organizations and Enterprises (idem); ⇒ Euro's Introduction; ⇒ Use of Internet as a New Economic Platform; ⇒ Resorting to Alternative Financing Instruments.</p>	<p style="text-align: center;"><u>S-O Strategy: Maxi-Maxi</u></p> <p>⇒ Production of New Cellulosic Fibres to be used in High Quality Textiles, in order to articulate Forest and Textile/Clothing Clusters (MEPAT, 1998). ⇒ Implementation of Pacts in Conjoined Marketing Campaigns between Textile producer and Retailers (MQE, 1997); ⇒ Cooperation Agreements between Enterprises and Support of Marketing Activities by Official Entities (Raposo, 1994); <input checked="" type="checkbox"/> Creation of International Store Chains, embracing Higher Quality Segments (e.g. resorting to Franchising); <input checked="" type="checkbox"/> Participation on Strategic Alliances with other Business Partners; <input checked="" type="checkbox"/> Participation on Vertical and Horizontal E-Marketplaces; <input checked="" type="checkbox"/> Dividing Enterprises into several Independent Units, in order to increase Functional Flexibility. <input checked="" type="checkbox"/> Creation of Technological Parks.</p>	<p style="text-align: center;"><u>W-O Strategy: Mini-Maxi</u></p> <p>⇒ Creation of Trade organizations outside the Country (Raposo, 1994); <input checked="" type="checkbox"/> Development of Private Label Subcontracting Activities, promoting partnership and specialization; <input checked="" type="checkbox"/> Development of a Production aimed at final Distributors (e.g. Own Collections); <input checked="" type="checkbox"/> Delocalisation (e.g. Installation of Productive Units in African and East European Countries); <input checked="" type="checkbox"/> Introduction of New Methods and Management Practices, in order to adjust Enterprises to Euro's Introduction; <input checked="" type="checkbox"/> Recruitment of New Working Staff with High Technical Training; <input checked="" type="checkbox"/> Up Grading of Human Resources, by means of Training Programs oriented to the rise of Global Enterprise Productivity.</p>
<p style="text-align: center;"><u>Threats (T)</u></p> <p>⇒ Competition from Lower Salary Costs Practicing Countries, in Lower Quality Segments (Sendin, 1998); ⇒ Competition from Industrialized Countries, in Higher Quality Segments (idem); ⇒ Development of Subcontracting Activities in Mediterranean and East European Countries (idem); ⇒ Imitation of European Models, by some Asiatic Producers.</p>	<p style="text-align: center;"><u>S-T Strategy: Maxi-Mini</u></p> <p>⇒ Use of Information Technologies, within Product's Conception, Production, and Trading Stages (MEPAT, 1998); <input checked="" type="checkbox"/> Creation of Interactive Promotional and Communication Bases via Internet (e.g. Purchase and Ordering Central); <input checked="" type="checkbox"/> Creation of Alternative Distribution Channels by using New Information Technologies; <input checked="" type="checkbox"/> Higher Added Value Production, by the incorporation of High Quality Raw Materials and creation of a Brand Image; <input checked="" type="checkbox"/> Promotion of Enterprises' Internationalisation; <input checked="" type="checkbox"/> Creation of Sample Centres within Enterprises, in order to improve the innovation and communication capacity.</p>	<p style="text-align: center;"><u>W-T Strategy: Mini-Mini</u></p> <p>⇒ Development of Niche Strategies (e.g. Meshes and Home Textiles), resorting to Technical Knowledge and Quality Control (Serenio et al, 1998); <input checked="" type="checkbox"/> Development of Promotional Strategies envisaging European High Scope Consumer Markets, taking advantage of geographic proximity; <input checked="" type="checkbox"/> Professional Training of Specialized Technicians; <input checked="" type="checkbox"/> Creation of a National Textile Federation, in order to defend Textile Industry's interests, before Portuguese Government, European Entities, and International Economic Organizations; <input checked="" type="checkbox"/> Creation of an integrated Plan, in order to conjoin Textile and Clothing Industry Supportive Entities' interests and competences (e.g. CITEVE, CILAN).</p>

4. CONCLUSIONS

In the present socio-economic context, SME should take full advantage of the opportunities provided by new communication and media networks, resorting to implementing Intranets (multimedia communication internal networks) and Extranets as privileged systems of external communication with clients, suppliers, and partners in a competitive environment, properly articulated with the interactive platform of Internet.

This implies the searching for best technologic partners and producers of multimedia contents (attractive and easily navigable), in order to create security and confidentiality conditions for the users of e-marketplaces. These strategic alliances without implying capital participation, may contribute for the reinforcing of the value chain and the consume chain of SME' participants.

Thus, competition should be permanently scrutinized and anticipating movements are to be developed, in order to face the arrival of new competitors. The promotion and distribution of products in an alternative way provided by e-marketplaces may contribute to significant increases in SME' control of the market and revert Asiatic competitors to second place.

Portuguese Textile and Clothing SME should bear in mind that interactive Trialable Advertising⁸ is no longer a dream and it has actually become a common demand among consumers. This indicates a profound change in consumers' profile and gives them the power of decision.

In the field of recommendations, it must be pointed out that Portuguese Government should support a change of mentality. The shift from a subsidy logic towards a fiscal incentive based policy should be encouraged in order to promote, on the one hand, cooperation and association among enterprises and, on the other hand, the creation of an international brand image for national textile and clothing products.

In this sense, it behoves the Portuguese Government to foment innovation practices and entrepreneurship, acting as a unifying element of apparently divergent trade interests, which could work together to pursuit efforts of production and promotion. This would allow to create a selective set of Portuguese Brands and to better represent "Made in Portugal" products.

Furthermore, Textile and Clothing Clusters should be promoted by incentives to entrepreneurship with specific productions, in connection with the main national raw materials suppliers, in order to create Technological Poles and Cluster Networks, which can be visible in generalist (vertical) or specific (horizontal) e-marketplaces.

Finally, the construction of a real vertical chain sheltered by a selective set of Portuguese Brands supported and promoted by national responsible entities, is a *sine qua non* condition to create an Electronic International Chain Store, which would give to Portuguese products the necessary visibility and the effective control of international distribution channels.

⁸ See the example of Interactive showcases, as well as the possibility, by consumers, of ordering clothes adjusted to their physiognomy via Internet.

REFERENCES

EP (1999): **Comércio Externo: 1980-1997**, Edição Especial da Revista Economia Pura - Tendências e Mercados, N.º 12-A, Ano I, Maio/Junho 1999, Lisboa.

FIEL, Jorge (1998): *As Malhas do Sucesso*, In Semanário EXPRESSO, Caderno Revista, N.º 1329, 18 de Abril, 1998, pp. 46 - 52 , Lisboa.

FREITAS, João (1997): *Têxteis, Vestuário, Curtumes e Calçado - Uma Visão Prospectiva*, In Documentos de Trabalho - *Working Papers*, Gabinete de Estudos e Prospectiva Económica - Ministério da Economia, Junho 1997, Lisboa.

GEPE (1995): **A Indústria Portuguesa, Horizonte 2015, Evolução e Prospectiva**, Gabinete de Estudos e Planeamento, Publicação do Ministério da Indústria e Energia, Julho 1995, Lisboa.

MEPAT (1998): **Portugal - Plano Nacional de Desenvolvimento Económico e Social 2000-2006: Uma Visão Estratégica para Vencer o Século XXI**, Publicação do Ministério do Planeamento e Administração do Território, Dezembro 1998, Lisboa.

MQE (1997): **O Sector do Vestuário em Portugal - Evolução das Qualificações e Diagnóstico das Necessidades de Formação**, Publicação do Ministério para a Qualificação e o Emprego - Instituto para a Inovação na Formação, Novembro 1997.

LEITÃO, João (1999): **Publicidade e Concentração Industrial: As Condutas Estratégicas das Empresas-Líder de Confecções e Vestuário do Distrito de Castelo Branco**, Dissertação de Mestrado em Ciências Económicas, Universidade da Beira Interior, Outubro de 1999, Covilhã.

PORTER, Michael (1998): *Clusters and The New Economics of Competition*, In Harvard Business Review, November-December, pp. 77 – 90.

RAPOSO, Mário (1994): **Análise da Internacionalização das Actividades das Empresas: Evidências Empíricas do Sector Têxtil Português**, Tese de Doutoramento no ramo de Gestão pela Universidade da Beira Interior, Covilhã.

SENDIN, Beatriz (1998): **Breve Análise do Sector Têxtil e Vestuário, 1998**, Associação Portuguesa das Indústrias de Malha e Confecção (APIM), Abril de 1998, Porto.

SERENO, Nuno; MARTINS, Luís; CAVALHEIRO, Frederico (1998): **500 Melhores & Maiores**, Editora Exame, Outubro/Novembro 1998, N.º 3, Lisboa.

TAPSCOTT, Don (1995): **The Digital Economy: Promise and Peril in the Age of Networked Intelligence**, McGraw-Hill, New York.

TAPSCOTT, Don; TICOLL, David; LOWY, Alex (2000): **Digital Capital: Harnessing the Power of Business Webs**, Nicholas Brealey Publishing, London.

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

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

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