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**A COMPARATIVE STUDY ON PRODUCT AND R & D STRATEGIES OF MAJORS
ASSEMBLERS OF BRAZILIAN CAR INDUSTRY**

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In a recent article (Ulrich, 2001) presented in **CoCKEAS** workshop (Berlin, November, 2001), J. Ulrich launch an interesting question to the international car industry researchers. In the referred text, which consider the European Car System, the German researcher discuss if there is, or not, a distinctive European approach to the car industry.

After giving a general balance analysing the main aspects of both hypothesis, the author points out (correctly, on my point of view) that the “production modularization” process of the European car industry is, probably, the strongest support to the idea of the existence of an European “model”.

In an influent and wide study on the product development in the international car industry, K. Clark and T. Fujimoto (1991) indicated the existence of a tendency towards an Europeanisation of product concepts as one of the major characteristics of the globalisation process of the car industry in the beginning of the 90^s.

Such hypothesis involved, by one side, the previous existence of different product concepts (the North-American, the Japanese, the European), and, by other side, the following moment converging to the European model, which had become, then, the dominant product concept. If this hypothesis is correct, it will reinforce to the postulate of a distinctive European approach¹, as mentioned before.

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¹ In fact, the authors present strong evidence which seems to attest the referred proposition (Clark and Fujimoto. 1999, chap. 3).

Aiming to offer a contribution to the debate on the existence, or not, of an European model for the car industry – in the terms presented in the *Call for papers to the Tenth GERPISA Colloquium* – I propose to present a comparative study on the product and the R&D strategies adopted by the main assemblers of the car industry established in Brazil, in recent years.

The choice of the five vehicle manufactures – specifically GM, Ford, Volks, Fiat and Toyota – were a result of a criterion which considered both the importance of the company in the Brazilian market and its international relevance. The analysis and comparison of the mentioned strategies of the five assemblers – more than that were not possible by this time – will consider both the international level and the regional one (Mercosur), and also the national one (Brazil) (Freysenet *et al.*, 1998; Chanaron, 2001; Humphrey *et al.*, 2000 ; Quadros *et. al.*, 2000).

Considering that, the proposition of this study involving the products and R&D strategies comparasion of the OEMs (GM, Ford, Volkswagen, Fiat, and Toyota) will consider the general context of the globalisation process, the intensification of the M&A and the strategic alliances between auto manufactures, as well as the occurrence of new spaces of rapid growth coming from the so called emergent markets (Bélis-Bergouignan *et. al.*, 1997; Fujimoto, 1998 e 2001; Calabrese, 2001)

The study proposed here is part of my PhD thesis, already in an advanced stage, due to be presented to the Instituto de Economia da Universidade de Campinas – UNICAMP – in the next July. During the researches on the international level, accomplished in the course of 1999, I have the opportunity to study during 10 month at IDS in the University of Sussex, England, under the very fruitful supervision of the Dr. John Humphrey.

An Abridged Bibliography Reference

ANFAVEA (2001) *Anuário estatístico da indústria automobilística brasileira - Edição 2000*. São Paulo.

BÉLIS-BERGOUIGNAN, M.C.; BORDENAVE, G.; LUNG, Y. “Global strategies in automobile industry” *Actes du Gerpisa*, n.18, 1996.

BOYER, R. e FREYSSENET, M. *Different paths for automakers at the turn of the century*. IMVP Sponsors Meeting. Cambridge, MA, October 1999.

CARVALHO, E. G. de *et.al.*, “ Indústria Automobilística Brasileira: Evolução Recente e a Estratégia de Produtos de Algumas das Principais Montadoras Instaladas no País”, Relatório Final, FINEP/GEEIN, 2001.

- CARVALHO, Ruy Quadros, QUEIROZ, Sérgio R. R., HUMPHREY, John; CONSONI, Flávia; COSTA, Ionara & FONSECA, Rodrigo R. (2000) *Globalização e reestruturação da Cadeia Produtiva na Indústria automotiva: qual é o papel do Mercosul?* Campinas, (Relatório Final convênio IPEA – DPCT/IG/UNICAMP, projeto 16/97. 252 p.).
- CANTWELL, J. and KOSMOPOULOU, E., “What Detremines the Internalisation of Corporate Technology?”, Discussion Paper # 284, vol. XII, University of Reding, 2000.
- CHANARON, J. J. “Implenting Technological and organizational Innovations and management of Core Competences: Lessons from the automotive Industry”, CoCKEAS, 2001.
- CLARK, K.B. and FUJIMOTO, T. *Product Development Performance: Strategy, Organization, and Management in the World Auto Industry*, Boston, harvard Business Press, 1991
- FREYSSENET, M.; LUNG, Y. “Between globalization and regionalization: what the future of automobile industry?” *Actes du Gerpisa*, n.18, 1996.
- FREYSSENET et. al., (eds.) *One best way? trajectories and industrial models of the world’s automobiles producers*. London, Oxford University Press, 1998.
- HUMPHREY, John and Mario SALERNO “Globalisation and assembler-supplier relationships: Brazil and India”. In: J. Humphrey, Y. Lecler and M. Salerno (eds), *Global Strategies, Local Realities: The Auto Industry in Emerging Markets*. Basingstoke, Macmillan, 2000, pp.149-175.
- FUJIMOTO, T. et. al. “Automobiles: Stategy-Based Lean production System”, the University of Tokyo, Discussion Papers, 2001.
- FUJIMOTO, T. “Capability Building and Over-Adaptation: a case of ‘Fat Design’ in the japanese Auto Industry”. In: Lung, Y. et. al., *Coping with Variety, Flexible Production Systems for Procduct variety in the Automobile Industry*, Ashgate, Aldershol, 1999.
- LAPLANE, Mariano e SARTI, Fernando (2000) "Profit strategies in Mercosur: adaptability to changing conditions as a key factor for competition in unstable markets". In: *Actes du GERPISA*, no. 29, abril.
- OECD, *New Patterns of Industrial Globalization: Cross-Border Mergers and Acquisitions and Strategic Alliences*, Paris, 2001.
- OECD, *L’ internationalisation de la R–D Industrielle*, Paris, 1998.
- SANTOS, A. M. M. *Desempenho da indústria automobilística*, BNDES nº 29, 2000^a
- SANTOS, A. M. M. e PINHÃO, C. M. *Indústria Automobilística no Mercosul*, Rio de Janeiro, BNDES, abril, setembro, n. 32, 2000b
- SANTOS, A. M. M. e PINHÃO, C. M. *Investimentos do complexo automotivo: atuação do BNDES*, BNDES Setorial - Complexo Automotivo, Rio de Janeiro, n. 12, p. 3-16, setembro
- STURGEON, T. and FLORIDA, R. “The World that Change the Machine: Globalization and Jobs in the Automotive Industry”, Final Report, IMVP, 1999.