

Analysis of manufacturing strategy as an explanatory factor of competitiveness in the large Spanish industrial firm

Lucía Avella*, Esteban Fernández, Camilo J. Vázquez

Dept. Administración de Empresas y Contabilidad, Fac. de Ciencias Económicas y Empresariales, Avda. del Cristo, 33071 Oviedo, Spain

Received 7 June 1999; accepted 20 July 2000

Abstract

This work focuses on analysing the growing importance of manufacturing strategies for the competitiveness of firms. It is considered that the emphasis on certain manufacturing competitive priorities (or capabilities) and decisions or practices (on the key decision areas) and their internal coherence can be the base for achieving sustainable or lasting advantages over competitors, thus originating superior business performance. The aim of this research work is to analyse whether or not there exists a correlation between the manufacturing strategy and the competitive success or business performance of a sample of large Spanish industrial firms. The database used is mainly made up of the information from a mail survey, aimed at the industrial firms set up in Spain which in 1994 (study reference date) employed over 200 workers. The results obtained, with the proposed methodology, reveal that it is not possible to identify a direct relationship between the manufacturing strategy and business performance of the sample of firms analysed. In this sense, the chosen manufacturing strategy, that is to say, the emphasis on certain manufacturing competitive priorities and decision areas (or practices) and their coherence, does not enable us to distinguish between best and worst performers, and so does not allow us to explain the level of competitiveness of the sample of large Spanish industrial firms analysed in this work. © 2001 Elsevier Science B.V. All rights reserved.

Keywords: Manufacturing strategy; Manufacturing competitive priorities (or capabilities); Manufacturing decision areas (or practices); Competitiveness; Business performance; Large Spanish industrial firm

1. Introduction: Conceptualisation of the manufacturing strategy and analysis of its influence on firms' competitiveness

The aim of this work is to test whether there exists any correlation between the manufacturing strategy and competitive success (measured by business performance) of a sample of large industrial firms set up in Spain. To this end, the work is structured in the following way: firstly, the concept

of manufacturing strategy and its influence on firms' competitiveness is analysed; secondly, in the light of the literature on the subject, the proposed objectives and hypotheses to be tested are described; thirdly, the methodology used to collect the data, the variables analysed and the description of the sample are presented; finally, following the description of the statistical analyses and the discussion of the main research results, the conclusions and limitations are presented.

In the past, manufacturing has been considered as an eminently technical function, the result of a set of decisions which are merely routine,

* Corresponding author.

E-mail address: lavella@econo.uniovi.es (L. Avella).

operational and exclusively focused on obtaining maximum efficiency. Traditional management has overlooked any strategic consideration regarding manufacturing activities. In fact, Skinner [1] was the first to articulate and propound the concept of manufacturing strategy, used to avoid the isolation of this area from the rest of the functional areas and from the firm's competitive strategy.

Leong et al. [2] point out that, except for terminology, there exists wide agreement in published work on the appropriate content of manufacturing strategy¹, and thus, the most important elements of the content of manufacturing strategy can be captured in two broad areas: (1) competitive priorities (or capabilities) and (2) strategic decision categories.

Manufacturing competitive priorities (or capabilities) may be defined as a consistent set of goals for manufacturing [2]. The review of various works enables us to state the existence of four key manufacturing competitive priorities (or capabilities): cost or efficiency, flexibility, quality and delivery. These competitive priorities are compiled, among others, in the works of Skinner [1,3], Hayes and Schmenner [4], Mayer and Moore [5], Romano [6], Buffa [7], Hayes and Wheelwright [8], Fine and Hax [9], Hayes [10], Hayes et al. [11], Leong et al. [2], Schroeder and Lahr [12], Corbett and Van Wassenhove [13], and Tunc and Gupta [14].²

On the other hand, different authors make different classifications of the manufacturing decision categories. In particular, the taxonomy designed by Hayes and Wheelwright [8] and Hayes et al. [11] distinguishes between the manufacturing strategic decision categories of a structural and infrastructural nature. According to these authors, structural decisions cause a long-term impact, are difficult to reverse or undo once they are in place and require substantial capital investment to alter or extend them; they include decisions related to: (a) capacity

(amount, timing, type), (b) facilities (size, location, specialisation), (c) technology (equipment, automation, linkages) and (d) vertical integration (direction, extent, balance). Infrastructural decisions are considered more "tactical" in nature because they encompass myriad ongoing decisions, they are linked with specific operating aspects of the business and generally do not require highly visible capital investments; among these it is fitting to mention those concerning: (a) workforce (skill level, wage policies, employment security), (b) quality (defect prevention, monitoring, intervention), (c) production planning/materials control (sourcing policies, centralisation, decision rules), (d) organisation (structure, control/reward systems, role of staff groups), (e) new product development processes and (f) performance measurement and reward systems.³ In the past, top management was exclusively concerned with structural decision areas; however, at the current time it is observed that *world-class* manufacturers pay the same attention to infrastructural decision areas (specially, those related to workforce management), as these constitute the bases for long-term competitiveness.

The studies on the strategic nature of manufacturing have their origin in the seminal work of Skinner and consider that production management can be a fundamental cornerstone for the competitive strategy of a firm, or at least on an equal level with the rest of the functional areas. This is also the approach underlying, among others, the works of Hayes and Schmenner [4], Skinner [3], Buffa [7], Hayes and Wheelwright [8], Fine and Hax [9], Swamidass [16], Hayes et al. [11], Cleveland et al. [17], Hill [18], Marucheck et al. [19], Schroeder and Lahr [12] and Corbett and Van Wassenhove [13]. It is suggested that manufacturing can contribute to firms' success supporting the implementation of the competitive strategy. Thus, manufacturing can become one of the main competitive advantages of the firms in the extent that the strategy of this area is in line with the competitive strategy and supports its implementation. The key to business success lies in the explicit formulation of

¹ In this sense, the distinction between the process and content of strategy, which has been long and clearly noted by business strategy researchers, is also being applied to the manufacturing strategy field.

² We did not consider the competitive priority of innovativeness, proposed by Leong et al. [2], or service, proposed by Garvin [15], as these are not widely accepted in the literature.

³ In particular, the later two strategic decision categories were added in the work of Hayes et al. [11].

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات