

productive dimension independently from their international aims; Two types of inter-organisational relationships emerge as distinctive. The first is with the commercial agents or firms, that is to say the vertical connection with the units at the lower end of the production chain. These connections permit the small units to gain access to external commercial capabilities (an area in which they are culturally and structurally weak). These links, besides simply being the means of distributing and selling the product, assist the firm in gathering vital information on market demands, on the competition, limitations and opportunities present, which would otherwise be difficult to find. Consortia or (horizontal connections) represent yet another typical and distinctive form of relationship among firms operating in the same or adjacent sectors. These links permit the sharing of resources and experiences, so simplifying the access to the foreign markets.

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## OPERATIONS MANAGEMENT AND STRATEGIC MANAGEMENT: TOWARDS AN INTEGRATION

Alberto De Toni and Stefano Tonchia, *DIEGM, University of Udine, Italy*

### ABSTRACT

*In this paper the authors advance a proposal that attempts to link the main old and new theories of corporate strategic management (from Industrial Organisation to Competence Theory), and the different variations (Lean Production, WCM, Strategic Flexibility, etc.) of the production paradigm that seem to have surpassed Fordism. These "variations" can be seen as different emphases, in the ambit of operations management, of the main constituent elements of a framework that seeks to unify the different strategic theories of the firm.*

### INTRODUCTION

The academic debate on the connections between operations management and strategic management has reached a crucial point. On one side we see an active reconsideration of strategic management in general, in the ambit of which the traditional Harvard model of Industrial Organisation (Porter, 1980) is criticised by the upholders of the theories that regard the resources and competencies of a firm as its principal source of competitive advantage. On the other, in the sphere of operations management, though faced with the recognised crisis of the Fordist production paradigm, the emerging paradigm has not yet been clearly defined (summarised by the terms Lean Production, World-Class Manufacturing, etc.). But what are the links between strategic management and manufacturing strategy, in other words, how is the corporate strategy in operations management to be interpreted? How can the interpretative problems linked to different approaches both to the corporate strategy and the manufacturing strategy be solved?

### CRITICISMS OF TRADITIONAL STRATEGIC MANAGEMENT

The structure-conduct-performance scheme, typical of the Industrial Organisation, is discussed both in regard to the origin of the firm's rent (the industry to which it belongs) and concerning the sustainability of its competitive advantage (determined by five forces - rivalry among existing competitors, threat of new entrants, threat of substitute products, bargaining power of suppliers and buyers). Studies have shown that industry is not a decisive factor in profitability (Rumelt, 1991), and in addition boundaries between industries are hazy and unstable. In addition the impact of the five competitive forces has been altered, by the adoption of a partnership relationship with the suppliers, and a relationship with the buyers aimed at customer satisfaction. The different profitability of firms is thus to be sought primarily, not among the factors of the context, though they have a certain amount of influence, but among the "discretionary factors", precisely those which have the advantage of a certain margin of autonomy and permit the firm to obtain different results.

In addition the Industrial Organisation is examined since it in fact provides two alternative strategic options - cost leadership and differentiation; surmounting performance trade-off has, on the other hand, become a leit-motiv of the new production paradigms and one of the greatest strengths of the firms. For example, Corbett and Wassenhove (1993) distinguish between "qualifying" performances (which are the minimal conditions for entry or remaining on the market) and "order-winning" performances (which permit to outdistance the competitors), and maintain that at least the "qualifying" level must be reached in all the performance dimensions and not in only one.

### AN ALTERNATIVE STRATEGIC APPROACH: THE COMPETENCE THEORY

The alternatives proposed to the Industrial Organisation, essentially belonging to the Resource-Based View (Wernerfelt, 1984) and Competence-Based Competition (Prahalad and Hamel, 1990), together with a few additional concepts (such as "path dependency", variety and the consequent disequilibrium as first cause of economic development, the "organisational

routines", etc.) derived from the Evolutionary Theories (Nelson and Winter, 1982), see the peculiarities, imperfect imitability and imperfect mobility of the resources and competencies possessed as the source of competitive advantage (Barney, 1991). These theories constitute a set of principles which can be united under the term "Competence Theory".

The *Resource-Based View* underlines the importance of the resources to achieve the competitive advantage, both in terms of resources possessed and the ability to manage them ("competencies"). The competencies explain how two firms, though with the same objectives and exactly the same resources, can achieve different performances, or vice versa how two firms can obtain the same performances even if with different resources (Grant, 1991).

The *Competence-Based Competition*, instead, was defined by Prahalad and Hamel in a well known article (1990). A core competence permit potential access to a high number of markets, is seen by the end customer as the principal source of value added to the product, and is difficult to imitate by the competitors. Competitiveness is based on the creation and development of competencies, and not on the products offered on the market; the financial resources are distributed according to the need to create and develop competencies, and not to the single strategic business units. In regard to the Resource-Based View, the Competence-Based Competition assumes a connotation precisely because of the emphasis placed on the "behavioural" aspect of strategic planning, that is, on their deliberativeness, the proactive stance, the amplitude of vision.

### LIMITS OF THE COMPETENCE THEORY

The limits and consequent criticisms made to the Competence Theory are:

- the exclusive interest focused on a single firm, considered separately from the industrial context (several authors have tried to surmount this limit, by considering the Industrial Organisation and Competence Theory jointly - see the following paragraph);
- the lack of a theoretical modelization which clearly defines the links between resources and competencies on one side, and the sustainable competitive advantage on the other: typical and model-type firms do not exist for the Competence Theory, because each firm is, by definition, unique;
- the unclearly defined relationship between deliberativeness and chance: it cannot be denied that various innovations and important competencies were unexpectedly discovered;
- the application of the theory exclusively to large, advanced, diversified firms, which compete on a world scale (firms typical of business school, almost mythical);
- the rigidity that the competencies can bring to an organisation (consolidated "routines" can also be an obstacle to the introduction of innovations).

Table 1 Comparative analysis of the Industrial Organisation and Competence Theory

	INDUSTRIAL ORGANIZATION	COMPETENCE THEORY
Object of analysis:	the industry	the firm
Firm characteristics:	typical of the industry	unique
Source of rent:	the industry	resources and competencies
Industry:	fixed, the strategy must conform to it	in evolution and difficult to define
Management:	portfolio of businesses	portfolio of competencies
Strategical options:	cost leadership and differentiation	depend on competencies and core products
Resources:	allocated to the business units	transversal to the business units
Competitive advantage:	based on the value for the customer	based on the value for the customer
Sustainability of the competitive advantage:	depends on five forces (current and potential competitors, substitute products, buyers and suppliers)	depends on the heterogeneity, the imperfect mobility, imitability and substitutability of the resources

### INDUSTRIAL ORGANISATION AND COMPETENCE THEORY

As already seen, both the Industrial Organisation and the Competence Theory have limits, which derive from their typical features, frequently too radical and opposed, summarised in Table I. Articles can be found in the literature that aim at overcoming such gaps and critically

reconsider both approaches, integrating them as far as possible into a coherent scheme. Among the most significant articles, are those by Porter (1991) and Amit and Schoemaker (1993).

Porter, who with good reason can be considered one of the founders of the Industrial Organisation theory, could not remain indifferent to the criticisms and the innovative proposals made by the upholders of the Competence Theory. According to Porter (1991), the Competence Theory brings new answers to the "longitudinal problem", which singles out the conditions that enable a firm to reach and sustain a competitive position favourable over time. However this problem cannot be detached from the "cross-sectional problem", aimed at understanding causes of superior firm performance at a given point in time and explained by the industry analysis.

Porter believes that the industry or business must remain the principal unit of analysis: it follows that the firm profitability depends both on the attractiveness of the industry in which the firm competes and on its relative position in that industry. If «the essence of strategy is choosing to perform activities differently than rivals do», the core competencies enable the choice of diversity to be followed.

Porter (1991) presents a framework in which the activities are the source of competitive advantage. Performing an activity requires tangible assets (physical and financial) as well as intangible ones (embodied in human resources and technology). While the tangible assets normally depreciate, the intangible ones can cumulate over time. The assets originate from external acquisitions or the practice of the activities themselves, and thus have, as a background, the managerial choices made over time, starting from certain initial conditions of the firm.

Amit and Schoemaker (1993) maintain that the profitability of a firm derives from the amount of overlapping and convergence between "strategic assets" and "strategic industry factors":

- the "strategic assets" (technical abilities, brand management, control of distribution channels, etc.) coincide with the resources/competencies according to the Competence Theory, in other words, they are specifics of a firm, difficult to imitate or transfer, they confer competitive advantage, derive from the incomplete rationality of the managers and their predisposition to risk (otherwise the firms, apart from their initial conditions, would operate in a regime of stability, copying the best firms, and thus there would not be any substantial difference in profit between the firms);
- the "strategic industry factors" are resources and competencies at the industry/market level, thus they more or less characterise all the firms to which they belong, and explain the success in respect to other industries/markets.

### THE DEBATE INSIDE OPERATIONS MANAGEMENT: MANUFACTURING STRATEGY AND NEW PRODUCTION PARADIGM

The theoretical confrontation at the corporate level is confirmed also in the field of operations, where the production paradigm emerging from the abandonment of that concerning mass production (Tayloristic-Fordist paradigm) has been interpreted in different ways.

However it must be said that the different proposals for a new production paradigm have been generally advanced disconnected from the corporate strategic management, most maintain the re-evaluated importance of the production function with the aim of pursuing the competitive advantage. So on one hand there is a great amount of literature concerning the manufacturing strategy, its content and relationship with the corporate strategy (Minor et al., 1994); while on the other, there are papers about the emergence of a new production paradigm, its characteristics and diffusion capacity. But how many of these contributions clearly define the role that this production paradigm would play in relation to strategic management, corporate strategy and manufacturing strategy? Sometimes one gets the impression that where the presentation of the new production paradigm is concerned, there is difficulty in speaking about strategic planning, and vice versa.

*Manufacturing strategy* is the deployment of the corporate strategy extended to the production function, which however should have a supportive - not passive - role. There exists a content and a process of the manufacturing strategy: the content regards the selected competitive priorities and the intervention choices made to realize them; the process regards the formulation and implementation of the strategy (Swamidass and Newell, 1987). However, the different manufacturing strategies are generally distinguished by the chosen competitive priorities; for

example, Miles and Snow (1978) distinguish between "defenders" (who pursue efficiency), "prospectors" (oriented towards product development and market), "analysers" (who try to pursue efficiency like the "defenders" when the contexts are stable but otherwise they behave as "prospectors"), and "reactors" (without a clearly defined strategy).

On the other hand in regard to the emergence of a *new production paradigm*, starting from the recognized limits of the mass-production paradigm (or the Tayloristic-Fordist one), there are some basic common principals that characterise the different proposals advanced to define it:

- a *repetitive production* ("Just-In-Time") versus an *intermittent one*, based on a *pull logic* (on the part of the market) versus a *push one* (on part of the firm);
- a *management-by-process organisation* versus a *functional one*, aimed at the *continuous improvement* versus *standard achievement*;
- with *performance compatibility/cumulativeness* versus *trade-off*;
- with the *synergetic effect* of the various choices and practices versus *isolated interventions*, and with the *involvement* of the human resources versus the traditional *antagonism* between employees and management.

In contrast to the "one best-way" (standardised production, economy of scale, physical concentration of the activities) typical of Fordism, previously Skinner (1974) had set up the concept of the "*focused factory*", in other words the manufacturing strategy must be focused on only one key successful factor. But this is not yet the new production paradigm, which, instead, seems to be based on the aforementioned principals and so once again seems to be a "one best-way". This "one best-way" has been called *Lean Production* (all must be lean!) by some, *World-Class Manufacturing* (we must be the best in the world!) by others.

*Lean Production* (Womack et al., 1990) is concentrated, above all, on the practices, indicating a series of «techniques for relentlessly and continuously eliminating waste from an operation», such as Just-In-Time, Total Quality Management, Concurrent Engineering, etc., up to the concept of *Lean Enterprise* (which include advanced relationships with the suppliers, more direct relationships with the customers, etc.).

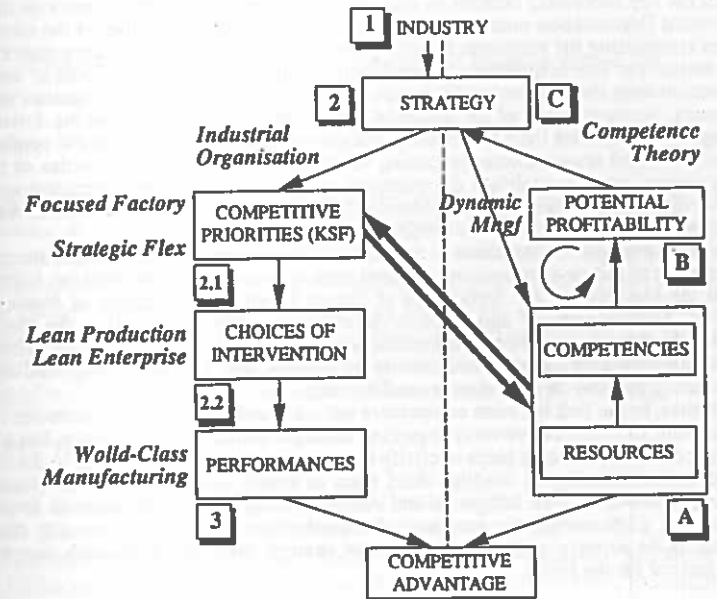
The *World-Class Manufacturing* (Schonberger, 1986), on the other hand, concentrates, mainly, on the performances (adopting the principle of "simplicity" along the entire length of the "chain of customers"): the manufacturing strategy must be targeted at optimal positioning within the industry, more than on streamlining the operations themselves.

Hayes and Pisano (1994) assert that being "world-class" is not enough, but a firm must be «able to change gear», that is, have "*strategic flexibility*", modifying with time its own key successful factors: they re-evaluate Skinner's concept of the focused factory, thus criticising the "one best-way" and stating that trade-off in the exact sense cannot be surmounted, but - by means of strategic flexibility - world-class firms can make a dynamic adjustment of the focus of their strategies. This is also called *Agile Manufacturing*, meaning the capacity to move to different businesses in a competitive environment characterised by "war of movement" (Stalk et al., 1992). If this capacity for "being dynamic" is mainly based on the organisational competencies and on learning-by-doing, Hayes et al. (1988) prefer to speak of *Dynamic Manufacturing*.

## THE PROPOSAL FOR A UNIFIED FRAMEWORK AND CONCLUSIONS

The proposal presented by the authors tries to link, in a single framework, both the main old and new theories of strategic management, and the different variations of the new production paradigm described in the literature. The model (Figure 1) has its origin in the effort to integrate Industrial Organisation and Competence Theory, that is, in the ambit of strategic management; in practice, starting from the different concepts of the relationship between strategies and competitive advantage, it attempts to relate the various elements that distinguish the two theories, and shows that both must be considered in order to have a complete analysis. In addition, the authors' proposal illustrates how the principal interpretations of the new production paradigm do no more than consider, from time to time, several elements of the framework. In the model, the two general strategic theories are presented separating the constituent elements and articulating them according to a sequential scheme of analysis. On the left part of Figure 1 can be seen the scheme characterising the Industrial Organisation (1-2.1-2.2-3), and on the right that characterising the Competence Theory (A-B-C).

Figure 1 Proposal for the integration of Industrial Organisational and Competence Theory, and position of its main declinations of the new production paradigm



The scheme of the strategic analysis according to the *Industrial Organisation* resumes Porter's well known sequence structure-conduct-performance: the industry structure, that is the competitive environment in which the firm is situated, positioning itself within the market with the competitors, suggests and describes the strategic decisions. These are realised in the selection of competitive priorities (in other words, in the identification of the Key Success Factors - KSF of the industry) and in the fulfilment of the intervention choices more in keeping with the attainment of these competitive priorities. Even though representing both - that is the competitive priorities and the intervention choices - the contents of a strategy, these are defined according to a sequence that first examines the definition of the competitive priorities and then the definition of the intervention choices. These choices regard technology (both incorporated into the products and productive processes, and that regarding information technology), the management (including practices of Just-In-Time, Total Quality Management and Concurrent Engineering), and the organisation (both internal and in relation to customers and suppliers).

The strategic analysis scheme according to the *Competence Theory* can, on the other hand, be represented by the sequence: resources/competencies - potential profitability - strategy. Identifying the resources and competencies of a firm one can evaluate the potential profitability and select the strategy best fitted to exploiting, valorising and consolidating it, according to a virtual circle typical of the learning organisation (A-B-C in Figure 1). Thus the resources, from one point of view constitute the source of the competitive advantage, from the other they define the strategic direction of the firm: this double role of the resources can be clearly seen in Figure 1. Therefore, according to the Competence Theory, the strategy cannot be translated as the definition of competitive priority and choices of intervention (as in the Industrial Organisation) but as the definition of the policies which are best suited to the management of the resources. Having defined and articulated the constituent elements of the two theories, let us see which could be the possible points of contact. Besides the strategy and the common objective of it

Chiachi Tsan and John Maguire, *Sunderland Business School, UK*

ABSTRACT

*This paper investigates the criteria by which the spectators evaluate the quality of their experience at a professional sport event. Apart from the inherent characteristics of most services, professional sports events possess at least two other unique features, the "helpless spectator" effect and the "mass-consumption" process, which pose challenges to the service delivery process. We discuss the dimensions of the professional sports service package, identified through an empirical study undertaken on two prominent professional sports in UK. The criteria were validated using expert opinion and a rating of their importance by the spectators. The results show high reliability.*

INTRODUCTION

Professional sport is an increasingly significant sector of the entertainment and leisure industry. It generates huge amount of national and international interest. In a study by the Georgia Institute of Technology, it was estimated that the sports industry generated \$15 (£93.8) billion of business and created 2.3 million jobs in the US in 1995, making it larger than the motion picture, radio/television, and education service industries combined together (Harverson, 1997). In the United Kingdom, a Keynote Report (Smith, 1999) estimated that the money spent on sport in UK in 1995 was £5.29 billion. The attendance at Premiership Football matches in 1996/97 season was over 10 million, according to CarlingNet web site (URL: <http://www.fa-premier.com/>). Even for a non-traditional sport like basketball, in the UK, the attendance for a single match reached over ten thousand for the first time at Manchester in 1996 (Smith, 1996). An industry of this importance deserves closer attention. However, academic and practitioner attention has focused mainly on marketing, individual elements of the service package, such as stadiums, and the psychological and physiological preparation of the direct participants.

Little work has been published which takes a holistic view of the service package and delivery during the live professional sports event, nor does much of the existing service operations management theory appear to have been applied. The dimensions of the service package required by the spectators are not clearly understood, though, of course anecdotal evidence is abundantly available. There appears to have been little systematic study published on professional sports in the academic service operation literature (Tsan and Maguire, 1997).

The purpose of this paper is to identify possible dimensions of the professional sports "service package" (Normann, 1991; Fitzsimmons and Fitzsimmons, 1994) from both spectators' and club managers' perspectives. It is hoped to understand the contents of professional sport service package and help practitioners to pinpoint areas for improvement

competitive advantage, the link between the branch on the left (Industrial Organisation) and that on the right (Competence Theory) of Figure 1 is given by the comparison between competitive priorities (or key successful factors) on one side and the resources/competencies on the other: the Industrial Organisation model requires verification of the practicability of the competitive priorities considering the resources and competencies possessed, like the Competence Theory model which for the acquisition, concentrating and conserving of resources needs the confrontation with the key successful factors present in the Industrial Organisation model. In other words, the postulation of the Industrial Organisation which prescribes the derivation of the competitive priorities from the industry analysis is insufficient and needs the confrontation with the possessed resources/competencies, which can confirm certain priorities or re-direct towards others, having analysed the potential profitability of the resources/competencies available; likewise the resources/competencies typical of a firm are of value also in relation to the competitive priorities selected by the firm.

Passing from strategic management to operations management, we can see how the principal interpretations of the new production paradigm seem to do no more than consider, from time to time, all the elements of the framework of Figure 1, with the exception of resources: the concept of "focused factory" and strategic flexibility (or agility) is based on the competitive priorities; the intervention choices are accentuated especially by Lean Production/Enterprise, while the performances are stressed mainly by World-Class Manufacturing; and Dynamic Manufacturing is based on competencies and learning.

In conclusion, in the link between competitive priorities and resources/competencies rests the key to settling so much controversy regarding strategic management; not only, but a unified framework of the type shown helps to clarify the numerous proposals advanced in the theme of new production paradigms, leading them back to single underlines of elements all important, which should be integrated and considered together. It only remains to point out how the lack of paradigmatic proposals for production regarding, above all, resources, compared to the already abundant literature on strategy, indicates a research stream of the greatest interest for the future.

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