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# Strategic planning and firms' competencies

Strategic  
planning and  
competencies

## Traditional approaches and new perspectives

947

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**Keywords** *Strategic planning, Resources, Competences, Competitive advantage*

**Abstract** *The traditional strategic model of industrial organization is criticized by the upholders of the theories that regard the resources and competencies of a firm as the source of its competitive advantage. This article presents these new strategic dictates in a critical form, examining the reasons that justify the striking interest being taken by researchers and managers, but also the limits of those principles, some intrinsic others that can be overcome by an integration with tradition. As a consequence, the article presents a framework which attempts to relate the constituent elements that distinguish the two main strategic theories and shows that both must be considered for strategic planning and performance management.*

### Introduction

The academic and managerial debate on strategic management appears to have reached a crucial point. There is an active reconsideration of strategic management in general, in the ambit of which the traditional model of industrial organization (IO) is criticized by the upholders of the theories that regard the resources and competencies of a firm as its principal source of competitive advantage (thus not the strategic conduct suited to the industry as, in contrast, the traditional theory maintains).

In this article we carry out an analysis of one of the most recent and controversial branches of research pertaining to corporate strategy: that known as the resource-based view (RBV), competence-based competition (CBC), or dynamic capabilities view (DCV). These approaches, though with some fine distinctions, show the same layout and solution principles to such an extent that one can talk *tout court* of a "competence theory" (CT).

CT is actually the most concrete and plausible alternative to the dominant strategic model of IO. This latter was introduced at a pioneering level by Bain (1968) and successively developed by Porter (1980, 1985). However, CT, in spite of the number of contributions, still appears as a series of interventions on different problems, treated according to a common prospective rather than a true theoretic body.

The intention of the analysis is to present the new strategic dictates in a critical form, on one hand examining the reasons that confer validity on them



and justify the striking interest taken by researchers and managers, and on the other their limits, some intrinsic others that can be overcome by further work and integration with former theories, in particular IO (whose basic concepts are well known and so are not outlined).

Having verified that the need to integrate new and old theories seems to be greater than their apparent irreconcilability, a framework to integrate IO and CT is proposed. Starting from two different conceptions of the relation between strategy and competitive advantage, where the two approaches converge, attempts have been made to relate the various elements that distinguish them.

Besides an in-depth confrontation of IO and CT, the innovative contribution of this paper lies in the integrated framework presented and in its implications for management.

### Limits and criticisms of IO

Those in favour of CT list a series of limits of Porter's theory, also known as IO because of the importance it gives to industries; the limits are linked to the way of understanding the corporate strategy and can be summarized as follows:

- the strategy concerns the competitive positioning of the firm within an industry of a given structure: this is ever less true, given the difficulty of defining the boundaries of industries and in addition their instability;
- the strategy aims at existing industries: in this way many possibilities are neglected; and
- the strategy is the result of an analytical process, while its execution is an organizational process: the phases of formulation and implementation of the strategy cannot be separated or made sequential, according to the Porterian scheme "structure-conduct-performance" (Prahalad and Hamel, 1994).

Having outlined the limits of a general nature, the strictures made upon the IO model which consequently lead to the affirmation of CT can be traced to the following specific points:

- *The profitability of the firm determined by the industry to which it belongs* (according to the sequence "structure-conduct-performance"). Rumelt (1991), in a well-known study, points out that the different profitability of firms depend on the performances of the single business units of a corporation, that is, on units operating in specific areas of business in an industry, rather than on the whole industry to which the firm itself belongs. The different profitability of firms must then be sought, firstly, not within the contextual factors such as position on the market, though they have a certain influence, but in what Nelson (1991) calls "discretionary factors", that is a decisional process that enjoys a certain margin of autonomy ("business choices"): if factors exist that can be managed with a

certain degree of freedom, it is inevitable that the firms obtain different results, though facing exactly the same competitive environment.

- *The existence de facto of only two strategic options – cost-leadership and differentiation.* Porter considers these options as alternatives, because they are founded on incompatible performances such as cost and quality. In contrast overcoming the trade-off between performances has become a *leit motiv*.
- *The sustainability of the competitive advantage determined by five forces* (rivalry among existing competitors, the threat of new entrants, the threat of substitute products, bargaining power of suppliers, bargaining power of buyers). The most evident aspect of modification due to the impact of these forces regards the relations between firms and suppliers and customers. In recent years we have seen ties of collaboration and partnership developed with the suppliers, while relations with the customers have evolved from one of force to one of customer satisfaction. Besides, the entry barriers into an industry are often of minor importance in respect to the distinctive and difficult-to-copy characteristics of some firms: these peculiarities, in fact, act as deterrents to competitors.
- *The relationship between strategy and technology.* Porter seems to have both a static (he considers the actual strategy and technology) and an instrumental (technology as a means of obtaining a better position on the costs front or on that of differentiation) vision of technology. Reflections on the other two possibilities are missing, that is, consideration of the relationship between present strategy and future technology (often the current decisions on strategy influence the process of “technology accumulation”) and between future strategy and present technology (the current technology characterizes the future strategy in terms of product and process innovations) (Itami and Numagami, 1992).

## RBV

The first researcher to propose a RBV was Edith Penrose (1959), even though her analysis of the resources was aimed at understanding the output of the firm rather than the definition of its strategic behaviour. Only recently has interest in this approach arisen, mostly in a critical key and as an alternative to the IO model, so within the ambit of strategic studies.

The seminal study on the theme was that of Wernerfelt (1984), though in some ways it still remains linked to the Porterian model. In fact, for Wernerfelt, “resources and products are two sides of the same coin”, where the resources are understood as “the assets, tangible or not, which are semi-permanently linked to the firm”. In practice, IO would take care of maximising profits, consigning the resources; RBV would, instead, concentrate on minimising the cost of resources, given a certain level of profit. Wernerfelt then applied Porter’s five competitive forces model to the resources, in particular he points out the

existence of “resource position barriers”, with a role similar to that of the entry barriers in an industry.

Successive works decisively move away from the Porterian theory and make determinant contributions to the definition of RBV.

Grant (1991) first of all distinguishes between resources and competencies:

- The *resources* are the input of the productive process, the basic unit of the analysis, which need accumulation and co-ordination. According to Grant, six categories of resources exist: financial; physical (plant capacity, availability of raw materials, etc.); human; technological (number and importance of patents, etc.); the reputation (recognition of the brand, customer fidelity, etc.); and organizational (values, management styles, etc.).
- The *competencies*[1] are placed at a higher level of the aggregation, and identify the capacity of a group of resources, if properly managed, to carry out an activity or reach a target. The competencies explain how two firms, though with similar objectives and exactly the same resources, can achieve different performances, or vice versa, how two firms can obtain similar performances even if with different resources[2].

The conceptual distinction between resources and competencies is a typical connotation of RBV. Amit and Schoemaker (1993) refer to the resources as a group of possessed or controlled factors available to the firm, that can be transferred or acquired from outside, while the competencies represent the capacity to spread resources by means of organizational processes so as to obtain the desired results (they are the fruit, in contrast to the resources, of information developed, exchanged and spread among the personnel of the firm). Aaker (1989) distinguishes between “assets” and “skills”: the former are linked to the possession, the latter to the doing. Dierickx and Cool (1989), in contrast, distinguish between “stock” and “flow”: the stock accumulates over time thanks to the flow, which is easily modified unlike the former.

Grant (1991) thus asserts that firm’s resources and competencies, on one hand provide the basic direction for a firm’s strategy, and on the other are the primary source of profit for the firm.

Consequently, the strategic planning should be divided into the following phases:

- (1) identify and classify the firm’s resources, appraise strengths and weaknesses relative to competitors, identify opportunities for better utilization of resources;
- (2) identify the firm’s competencies, and the resources inputs of each competence;
- (3) appraise the rent-generating potential of resources and competencies;

- (4) select a strategy which best exploits the firm's resources and competencies relative to external opportunities; and
- (5) identify resource gaps which need to be filled (invest in replenishing, augmenting and upgrading the firm's resources).

One of the subjects best treated by RBV regards the "sustainability of the competitive advantage", understood by Hall (1993) as "the "capability differential" maintained for a significantly long period".

Barney (1991), in a work that has become fundamental, individuates in the "heterogeneity" and in the "imperfect mobility" of the resources the conditions necessary for a sustainable competitive advantage; consequently the resources must:

- be valuable, increasing efficiency and effectiveness;
- be rare, in other words utilized by only one or few firms;
- be imperfectly imitable (due to one or more of the following factors: unique historical conditions; causal ambiguity[3], when the link between controlled resources and competitive advantage is not understood or only partially or in a vague manner; complexity of internal relations and those with the customers and suppliers); and
- be imperfectly substitutable, that is, equivalent resources from a strategic point of view do not exist.

In short, it can be stated that the definite conquest of RBV is due to the link established between the firm's internal resources and a sustainable competitive advantage. The role of the firm's external environment is re-evaluated (together with its five forces) when determining its competitive advantage and profitability. At the same time the hypotheses regarding perfect homogeneity of the distribution of resources between firms operating in the same industry and of their perfect mobility fail: to determine an advantage, the resources must confer on the firm that possesses them traces of uniqueness and non-imitability, neither can they be easily transferred or substituted.

If all the firms were equal in regard to the endowment of resources, there would be no profitability differences among them and all would earn the same amount. The amount earned may not be proportional to the quantity of resources possessed, quantities measured in monetary terms: there are "resources" – or more exactly "competencies" – that are the ability to manage the resources, and thus difficult to evaluate, but can make the difference.

Besides, the differences between firms exist because there is not transparency and certain mechanisms between possessed resources and performances obtained are not well known, indeed the links are multiple and difficult to form. That is, at least for a certain period of time, the advantages of some firms, in respect to others, are protected and the efforts made to rise above the average are repaid.



One of the most strategically important firm's resources is knowledge: the knowledge-based view of the firm (the firm is conceptualized as an institution for integrating knowledge) is an outgrowth of RBV (Grant, 1996). Since the origin of all tangible resources lies outside the firm, it follows that competitive advantage is more likely to arise from the intangible firm-specific knowledge which enables it to add value to the incoming factors of production in a relatively unique manner (Spender, 1996).

Knowledge management perspective, which privileges the consideration of intellectual resources, could enrich the debate on RBV, linking together the concepts of competence, governance, and entrepreneurship (Foss and Mahnke, 2000), treated in the paragraph on comparative analysis of CT and IO. At the same, a completion of analysis could derive from studies not only on but also in organizations, testing cultural basis and ethnographic variables (Rouse and Daellenbach, 1999).

### CBC

The first to mention "distinctive competence" was Selznick (1957) – though understood more in the sense of a bond than a variable on which to act – and the concept was treated those same years by the "Austrian economic school". However, the strategic approach based on the competencies (CBC) is much more recent (Snow and Hrebiniak, 1980) and has been outlined with strategic valences by Prahalad and Hamel (1990) in a well-known article in the *Harvard Business Review*. They think of the "core competencies" of a firm as the factors that determine its success (Lenz (1980) calls them "strategic capabilities").

CBC enters the field of studies on RBV, to such an extent that some authors do not distinguish between them (e.g. Porter, 1991); however it assumes a connotation precisely because of the emphasis placed on the "behavioural" aspect of strategic planning, that is, on its deliberativeness, proactive stance and amplitude of vision (Hamel and Prahalad, 1994). In particular, while RBV individuates practically *ex post* the resources that determine a competitive advantage, CBC tries to understand a priori which are these resources/competencies. In addition – as Montgomery (1995) observes – CBC follows a process orientation that RBV does not consider.

According to CBC, a solid competitive advantage is based on the capacity to create, strengthen, and broaden the firm's core competencies to make new products that will be a success on the market. Prahalad and Hamel (1990) define "core competence" as "the collective learning in the organization, especially how to co-ordinate diverse production skills and integrate multiple streams of technology": they quote for example – among others – Sony's capacity to miniaturize, Canon's optical technology, and Honda's engine design.

A "core product" is the "physical representation" of a core competence, as that which makes a core competence visible is not the final product but a product (or part or subset) that is at a level intermediate between the

competencies and the finished products (also called “product platform” (Meyer and Utterback, 1993)). In Prahalad and Hamel’s (1990) view, the diversified firm resembles a tree, where the core competencies are the roots which supply food, support and stability.

Core competencies to be such must:

- permit potential access to a high number of markets;
- be seen by the end customer as the principal source of value added to the product; and
- be difficult to imitate by the competitors.

Competencies, in contrast to material goods, increase the more they are used and shared. The non-material resources in fact are characterized by: ability to settle through people (“organizational memory”), uniqueness, difficulty to acquire, difficulty to copy, multiplicity of uses, perishability if not used, and being incremental.

CBC could be compared to the capabilities-based competition of Stalk *et al.* (1992), which accentuates the aspects of closeness to the customer and extension of the capabilities/competencies along the entire value chain of the firm. The need to abandon functional management and proceed in a transversal manner is common to both (“the building blocks of corporate strategy are not products and markets but business processes”). Also, the importance given to the human factor (the capacities, in virtue of their transversal and collective nature, for the most part do not exist in a small number of people, but a large number of people each playing a small part), and the flexible dynamic character are recognized as the strategy to adequately face market instability (we have passed from a “war of position” to a “war of movement”, and need to have “acuity” to foresee the future development of the markets). So firms need, according to the analogy made by Stalk *et al.* (1992), to be “capabilities predators”, that is move rapidly from one business to another, copying capacities, developing them so as to assume the role of leader, and this is possible only thanks to flexible human resources and transversal management of the firm.

This is aligned with the thesis of Cockburn *et al.* (2000), for whom the origins of competitive advantage lies in the ability to identify and respond to environmental cues well in advance of observing performance-oriented pay-offs.

## DCV

Also following the dynamic aspect just faced by Stalk *et al.* (1992), much more consideration for the evolution of firm capabilities has appeared in recent works (including a special issue of *Strategic Management Journal* (Helfat, 2000)). One of the major themes deals with the question of how it is that, over time, some firms manage to become successful using their capabilities, while



other firms do not. Furthermore, how does the nature of technology and markets affect the ability of firms to alter their capabilities over time in order to prosper? And under what conditions do successful firms in an industry end up with relatively different vs. somewhat similar capabilities?

The framework for dynamic capabilities is own to Teece *et al.* (1997), who theorize that competitive advantage of firms rests on distinctive processes (ways of coordinating and combining), shaped by the firm's (specific) asset positions, and the evolution path(s) it has adopted or inherited. They distinguish:

- models of strategy emphasizing the exploitation of market power (like the competitive forces of IO or the game theory for studying the nature of competitive interaction between rival firms);
- models of strategy emphasizing efficiency (like RBV, which is based, according to Teece *et al.* (1997), on scarce firm-specific resources); and
- a dynamic capabilities approach.

In this latter case, the term "dynamic" refers to the capacity to renew competencies so as to achieve congruence with the changing business environment, given path dependencies and actual market positions. The term "capabilities" emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and competencies to match the requirements of a changing environment.

As a consequence, competitive advantage of firms seems to lie with their managerial and organizational processes (the way things are done in the firm, or its routines, or patterns of current practice and learning), shaped by their (specific) assets, market position, and paths done.

Eisenhardt and Martin (2000) recognize that dynamic capabilities are a set of specific and identifiable "processes" (such as product development, strategic decision making, alliancing, etc.), which have commonalities across firms in terms of key features (popularly termed "best practice"), in so violating the RBV assumption of heterogeneity across firms. So where does the potential for long-term competitive advantage lie? It lies, according to Eisenhardt and Martin (2000), in using dynamic capabilities sooner, more astutely, or more fortuitously than the competitors; therefore, long-term competitive advantage lies in the resource configurations that managers build using dynamic capabilities, not in the capabilities themselves.

Furthermore, Eisenhardt and Martin (2000) distinguish between moderately dynamic markets, in which dynamic capabilities are more homogeneous, fungible, equifinal, and substitutable than is usually assumed, and high-velocity markets, where these processes are highly experiential and fragile, with more unpredictable outcomes, and emphasis on selection (new knowledge created for new situations) rather than variation (embedded in

cumulative existing knowledge). So, in both cases, orthodox RBV misses the reality.

Makadok (2001), rather distinguishing between moderately dynamic markets and high-velocity ones, evidences two different causal mechanisms about how firms create economic rents: a “resource-picking” mechanism (being more effective than rivals at selecting resources) and a “capability-building” mechanism (being more effective than rivals at deploying resources). These two rent-creation mechanism are complementary in some circumstances but substitutes in others.

### Limits and criticisms of CT

The limits and the criticisms of CT regard both the common bases of RBV, CBC and DCV, and the organizational-managerial aspects, thus concerning mainly CBC (DCV, also being newer, is actually far less criticized).

Regarding the common foundations of CT, the criticism centres on:

- *The exclusive interest for a single firm, taken out of the industrial context.* Some authors (Porter, 1991; Amit and Schoemaker, 1993) have tried to overcome this limit, considering CT and IO together (see the successive paragraph).
- *The lack of a theoretical model which clearly defines the links between resources and competencies on one side, and sustainable competitive advantage on the other.* According to Doz (1996), the lack of “a solid empirical base and of a micro-theoretic foundation” makes it difficult to establish and discriminate the effects of single resources/competencies on the performances of the firm. This results in the serious problem not only of the a priori, but also of an a posteriori analysis, aimed at individuating the causal connection between resources/competencies possessed and the performances obtained.
- *The not well clarified relationship between deliberateness and chance.* In contrast to what CT affirms, it cannot be denied that several innovations and important competencies were generated without having been foreseen and – even less apparently – in a completely fortuitous manner (“stochastic” (Wernerfelt, 1995)).
- *The application of the theory exclusively to large, advanced, diversified firms, which compete on a world scale* (almost “mythical”, typical of business school firms).

In regard to the criticisms made more specifically of CBC, there are:

- *The doubts about the real value of the organizational competencies.* For some authors the importance attributed by CBC to the organizational competencies is excessive: no strategic analysis can accurately foretell the future consented by the present capabilities. Besides, as the improvement is continuous and unstoppable, there cannot exist consolidated

competencies which will generate competitive advantage in the long term (Collis and Montgomery, 1995).

- *The rigidities that the competencies can cause in an organization* (“organizational inertia” (Rumelt, 1995)). There is a “paradox between ‘core capabilities’ and ‘core rigidities’ in the development of a new product” (Leonard-Barton, 1992). On one hand the competencies possessed are important, particularly the technical ones, to develop a new product in a short time and at a reasonable cost. On the other, especially if the projects are extremely innovative, it is necessary to change the values and organizational culture which could be hindered by the present competencies (Ghemawat, 1991).
- *The dilemmas that the management must face in the handling of the competencies* (for example, an explicit diffusion of the competencies versus a sufficiently free and autonomous process of learning, a difficult integration of very specific competencies versus an easier integration of less specific competencies, making use of the existing competencies versus a search for new competencies, etc. (Doz, 1996)).

Montgomery (1995), besides criticisms and limits, lists some fundamental characteristics of CT that should be “re-evaluated”; these include:

- the optimism and emphasis placed on the capacity of the resources to give a competitive advantage;
- the excessive attention given to a restricted number of resources, the so-called “strategic” ones, while resources are neglected which, though not generating competitive advantages, are fundamental to the positioning on the market and survival (“that is, the consideration of a middle way between triumph and death is missing”);
- the scarce consideration of how the resources can lose value, seeing that this can happen in a much shorter time than the reverse process; and
- the lack of consideration of the negative impact (a bad reputation, running into debt, etc.) that certain “resources” can cause.

There also more radical criticisms at CT. D’Aveni (1994) discusses the sustainability of competitive advantage; in particular, it argues that the successful key for success is the continuous disruption and reconstruction of competitive advantage (“hypercompetition”), through always new factors, therefore not exploiting and consolidating an asset of resources and competencies. The inimitability of resources is substituted by an unpredictable competitive conduct.

Lengnick-Hall and Wolff (1999) view three “approaches to strategy”: a capability logic (our CT), a guerrilla logic (similar to the preceding hypercompetition), and a “complexity logic” (“where the strategic success is a function of a firm’s talent for thriving in dynamic nonlinear or chaotic

systems, that rely on network feedback and emergent relationships ... a blend of competition and cooperation ... a dynamic tension embedded between various actors and processes, as well as between a firm and its context"). (See also Senge (1990) on leadership, and the "the science of management complexity" by Stacey (1996).)

Priem and Butler (2001), in a famous recent article, strongly criticize CT, underlining an "elemental fallacy" of RBV in particular. In fact, the RBV value definitions clearly show that is the market environment that determines the degree of value held by each firm resource in RBV; thus, resource value is determined from a source exogenous to RBV, which instead makes an implicit assumption of homogeneous and immobile product markets (while product and customer factors vary so that resource value should vary too).

Barney (2001) – one of the father of RBV – replied to Priem and Butler, introducing a sort of parametrization in respect to the environment or market structure; this "parametrization" regards: value, rarity, imitability of the resources. He also tried to overcome the tautology critique (only valuable resources can be sources of competitive advantage, but this is the feature of valuable resources), inviting not to confuse cause and effect: "if the relative value of a firm's competitive actions are effects, the resource-based logic indicates that attributes of firm resources – their value, rarity, imitability, and substitutability – are the causes".

In the same work, Barney (2001) widens the RBV spectrum analysis, considering the "strategic alternatives": "to the extent that developing strategic alternatives a firm can use to exploit the resources it controls is a creative and entrepreneurial process", a kind of capability itself in the rent appropriation process by the stakeholders ("first, the ability to implement strategies is, itself, a resource ... second, implementation depends on resources").

### Comparative analysis of CT and IO

As was seen in the paragraphs above, IO and CT have different features, to such an extent that at times they seem irreconcilable and any attempt at their integration difficult. The objects to be analyzed appear too different, the interpretation of the causes at the source of the firm's profitability, the suggested way of managing and selecting strategic options; the only point in common seems to be the consideration of the competitive advantage in terms of value offered to the customer, though again the causes for the sustainability of this advantage are different (Table I).

The merit of CT, and its growing esteem or re-evaluation, are due it having shifted the attention of managers and researchers to the resources, the firm's competencies and strengthened the branch of studies called "inside-out" (which analyzes the source of the competitive advantage starting from inside the firm), in contrast to the dominant school of thought defined as "outside-in" (which analyzes the source of the competitive advantage starting from outside the

**Table I.**  
Comparative analysis of  
IO and CT

	IO	CT
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

firm, that is from the industry), and can be traced to Porter’s (1980, 1985) competitive model.

This revived attention paid to the single firm poses, however, the problem of the relations with the industry analysis, risks underestimating the influence of the latter, and in short challenges the researchers to construct a theory which considers jointly, and in a balanced manner, the firms’ particular characteristics and those of the industry in which it operates.

In reality the link between “inside view” (the firm) and “outside view” (the market) has already been made by Andrews (1971). He defined the strategy as the combination between what a firm can do (strong and weak points) in the ambit of all that it could do (opportunities and threats) – a model known as SWOT, from the initials of strengths, weaknesses, opportunities, and threats. “The RBV can be seen as an excellent starting point for analysis of the relative strengths and weaknesses of firms, while a strategic positioning approach (i.e. IO) is probably the cornerstone of any opportunities and threats analysis” (Rugman and Verbeke, 2002).

In essence, it could be said that the two main schools of strategic management (on one side that of Chandler (1962) and Andrews (1971), or the Harvardian school of business policy, considers the strategy in the broad sense, as the firm’s targets and means available, and on the other side that of Ansoff (1965) and Hofer and Schendel (1978), considers the strategy in the narrow sense, as only the targets pursued), the Harvardian one, though later projected to the outside in the first contributions made by Porter (1980, 1985), was not in reality very far from an attempt to integrate RBV and IO, as recognized recently by Porter (1996).

Wernerfelt (1984), who can be considered to have initiated the line of research on CT, did not think of it as an alternative to the IO theory but, according to him, the conditions that give value to the resources are not unlike, *mutatis mutandis*, those which mould the structure of an industry according to the IO theory: resources (meant as strategic) that are more or less difficult to acquire, on the market correspond to a greater or lesser bargaining power of the suppliers of materials, the substitutability of the aforementioned resources is analogous to the threat of substitute products, while the impossibility of copying the resources of a firm are the counterpart, in an industry, of the entry barriers and mobility.

Successive contributions have moved CT ever further from IO. As a result there is an increasing number of papers which aim at overcoming that distance and critically reconsider both approaches, integrating them as far as possible into a joint vision. The most important of these are by Porter (1991), Schoemaker (1992), Amit and Schoemaker (1993), Mahoney and Pandian (1992), Foss and Eriksen (1995), and those related in some ways to the organizational economics, all of which will be summarized in the following sub-paragraphs; instead, in the next paragraph, the authors advance their own proposal for integration.

But before examining contributions aimed at jointly considering IO and CT, let us also mention two parallel research streams.

The first one is that opened by Eisenhardt and Sull (2001), who define a third way for strategy, besides “position” (i.e. IO, based on establishing position in attractive markets with the question: “Where should we be?”) and “resources” (i.e. TC, based on establishing a vision with resource leverage with the question: “What should we be?”). The new strategic alternative is named “simply rules”, because it is based on key processes and unique simply rules, aimed at pursue opportunities in rapidly changing and ambiguous markets (“When the business landscape was simple, companies could afford to have complex strategies; but now that business is so complex, they need to simplify”). The question is now: “How should we proceed?”. We think the proposal has merits, but more for stimulating the strategic debate in general than for really introducing a new strategic theory.

The second parallel stream regards the relationship between strategic management (the ambit of IO and TC) and entrepreneurship. Entrepreneurship comes first, because is about firm creation; strategic management is about how advantage is established and maintained from what is created. Several authors (e.g. Hitt *et al.*, 2001 (editors of the relative special issue of *Strategic Management Journal*) underline the necessity of a much more integration between the two ambits: “one of the domains in which the integration between entrepreneurship and strategic management occurs naturally is that of resources and organizational learning”. In fact, at



the origin of the firm/wealth creation is an entrepreneurial mindset, a capability for vision under highly uncertain conditions, which is a unique and inimitable resource. This stream is very recent and – though it does not integrate IO and CT – it could help in clarifying some particular intangible resources of the firms.

### Porter's view

Porter, who with reason can be considered the principal advocate of the IO theory, could not remain silent in front of the criticisms and new proposals of the CT supporters.

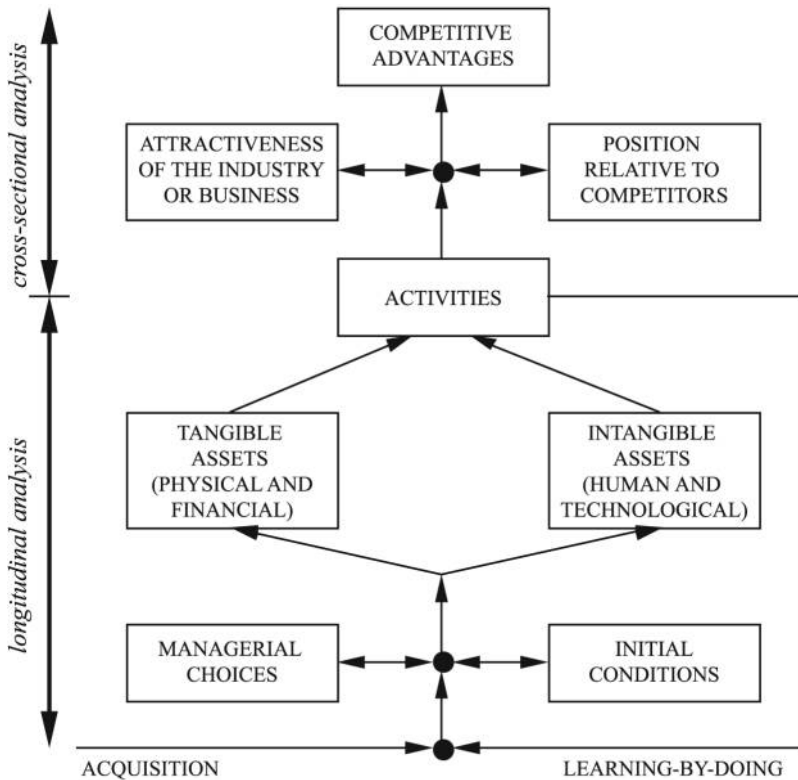
According to Porter (1991), CT proposes to bring, to the strategic reflection, new answers to the “longitudinal problem”, which consist of the individualization of the conditions that permit a firm to reach and hold on to a favourable competitive position over time. This problem, however, cannot be separated from the “cross-sectional problem”, aimed at understanding the causes at the base of the firm's superior performance at a precise instance in time.

Porter (and this is also the opinion of Collis and Montgomery, 1995) believes that the industry or business must remain the principal unit of analysis, as the possession of determinate resources or competencies should be, in any case, compared with those of the competitors: 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. Then, 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, 1996).

Porter (1991) presents a framework (Figure 1) 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.

The reason why firms are able to carry out activities at a lower cost or in such a way as to create a greater value for the customer lies in that which Porter calls “drivers”, and which – as we see it – are nothing more than those particular assets that permit activities which determine competitive advantages to be carried out.

Thus, while the cross-sectional problem can be better understood by analysis of the industry, CT (which then is not given as an alternative but as a complement) can answer some questions linked to the passing of time, in other words to the longitudinal problem.



Source: Porter (1991)

**Figure 1.**  
The source of  
competitive advantage  
according to  
Porter (1991)

### Schoemaker's and Amit-Schoemaker's view

Schoemaker (1992) considers the so-called "strategic vision" to be the unifying characteristic of the two approaches (IO and CT). It is none other than the answer to the most important questions that the firm managers must pose: how to keep a competitive advantage, which new products and markets to aim at, etc. This is the global vision of the firm, where both specific resources and agent forces at the industry level have a place; this vision is realized through four phases:

- (1) generate broad scenarios of possible futures;
- (2) conduct a competitive analysis of the industry and its strategic segments;
- (3) analyze the company's and the competition's core capabilities; and
- (4) identify the strategic options.

The choice of strategic options thus passes through the analysis of the competencies, and not only – according to IO – through the industry analysis. Together with Amit, Schoemaker maintains that the profitability of a firm derives from the amount of overlapping and convergence between “strategic assets” and “strategic industry factors” (Amit and Schoemaker, 1993) (see Figure 2):

- The *strategic assets* (technical abilities, brand management, control of distribution channels, etc.) coincide with the resources/competencies according to CT. In other words, they are specific of a firm, difficult to imitate or transfer, they confer competitive advantage, and 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 characterize all the firms that possess them, and explain their success in respect to other industries/markets.

Thus a firm could reach a higher than average income if it belonged to a profit-bearing industry, marked by specific “strategic factors”, but anyway the income would be different from that of all the other firms of the industry because of the unique specificity of that company, that is because of its “strategic assets”.



**Figure 2.**  
The source of competitive advantage according to Amit and Schoemaker (1993)

Source: Amit and Schoemaker (1993)

Amit and Schoemaker (1993) besides CT and IO, also consider the behavioural decision theory (Cyert and March, 1963), according to which when managers determine a strategy problems intervene that are linked to (Figure 2):

- the uncertainty (of the economic, social and technological environment, and the behaviour of the competitors and customers);
- the complexity (numerous interrelated variables have to be evaluate);
- the intraorganizational conflict (between who decides and who “suffers” the decisions).

Without uncertainty, complexity and conflict, the process of strategic planning would be perfectly rational and its results probably optimal, but also duplicable without particular difficulty. In other words, the behavioural decision theory and CT would explain why the equilibrium within an industry or of a market segment have finite lives, that is, it would give IO a dynamic-evolutive perspective.

### **Mahoney and Pandian’s confrontation view based on the isolating mechanisms**

Among the other attempts made to integrate CT and IO, those of Mahoney and Pandian (1992), Foss and Eriksen (1995), and Schroeder *et al.* (2002) are worth noting.

The unifying concept between the two approaches is – according to Mahoney and Pandian (1992) – that of the “isolating mechanisms”, defined at the level of each single firm by the supporters of CT (barriers to imitation), but corresponding to entry and mobility barriers respectively at the level of industry and of “strategic group” (that is in the ambit of IO (Porter, 1980)).

The key problem in the individualization of the rent determinants thus shift towards the analysis of the isolating mechanisms, operating at both the “micro” (the corporation) and the “macro” (the industry or the strategic group) levels, and their combinations.

At the “micro” level, the barriers to imitation are met (typical of CT), which regard the specificity of the resources possessed by the firm, the complexity of their individualization and interpretation, the aspect of tacit knowledge that often distinguishes them, the close dependence on the firm’s history (“path dependency” (Dosi *et al.*, 1992)) and culture.

At the “macro” level, entry and mobility barriers are met. Typical entry barriers to an industry, and in a wider sense also mobility within an industry, are: the economies of scale, the capital requirements, possible costs of conversion, access to distribution channels, the product differentiation (brand image and customer fidelity), the government policies in terms of laws and regulations, the learning curves, patents and trademarks, favourable geographic position and privileged access to the raw materials (Porter, 1980).

### **Foss and Eriksen's "industry capabilities"**

Foss and Eriksen (1995) underline the importance of extending the investigation beyond the boundaries of the firm, a fact neglected by the upholders of RBV and barely considered by those of CBC in the ambit of the strategic alliances and in general the various forms of collaboration between firms (Lei and Slocum, 1992).

They introduce the concept of "industry capabilities", competencies of firms adhering to an industry or of a strategic group, so they do not belong to an individual but are a shared property, even in the absence of explicit co-ordination, and as such will generate income (one thinks, for example, of the industrial districts). The "industry capabilities", as the firm's competencies, are the result of an irreversible process of accumulation, produced thanks to the integration of resources and competencies. The "industry capabilities" are thus analogous to the "strategic industry factors" of Amit and Schoemaker (1993).

In particular Foss and Eriksen (1995) assert that every firm must choose a strategic position in a Euclidean space consisting of resources and competencies, both individual (that is, specific to the firm) and collective (that is, typical of groups of firms); in this positioning, the managers must evaluate the distance they intend to keep between the firm and its competitors, in other words follow a heterogeneous or homogenous asset-accumulation strategy.

Heterogeneity is advisable from the CT viewpoint, as the acquisition and development of homogeneous competencies would preclude the search for a higher than average income. On the other hand, following a strategy oriented towards homogeneity has advantages linked to the possibility of learning from the competitors and preparing faster the resources necessary for success in an industry.

CT and IO thus become strategic theories in the ambit of which prevail, respectively, a strategy of heterogeneity and a strategy of homogeneity (in respect to the other firms in an industry).

Starting from similar positions, Levinthal (1995) points out the heterogeneity resulting from the present competition, in particular, the differences existing between the firms are increased by interaction with the market. Two types of mechanisms are involved:

- (1) "self-reinforcing"; and
- (2) "co-evolution".

The former mechanism refers to the fact that in many cases favourable market positions are consolidated in a measure more than proportional to the investments made. The second mechanism finds confirmation in the capacity and long sightedness of some managers, who, besides deciding the fate of their own firms, can also influence the evolution of the industry to which they belong.

Internal learning derives from employees' cross training, multiple tasks and suggestion systems; external learning instead comes from long-term relationships and close communication with suppliers, together with an active involvement and feedback from the customers.

Strategic  
planning and  
competencies

### **Firm's external linkages for supporting internal capabilities development**

The theme of external networks forcing the internal capabilities development has becoming more and more frequent in literature. For instance, Lee *et al.* (2001) distinguish between the cooperative "bilateral" contribution of partnership-based linkages (measured by strategic alliances with other enterprises, collaborations with universities and research institutes, and participation in venture associations) and those "unilateral" from sponsorship-based linkages (consisted of financial and nonfinancial support from commercial banks, public institutions and government).

The interfirm cooperation as a source of competitive advantage further enriches the confrontation debate between an (internal) CT view and an (external) IO one. It is very interesting the relationship with organizational economics (OE) (Williamson, 1975), which is based on "transactions cost": interfirm arrangements observed in contemporary economies represent alternative ways of organizing and can permit superior performance in respect to simple market transactions.

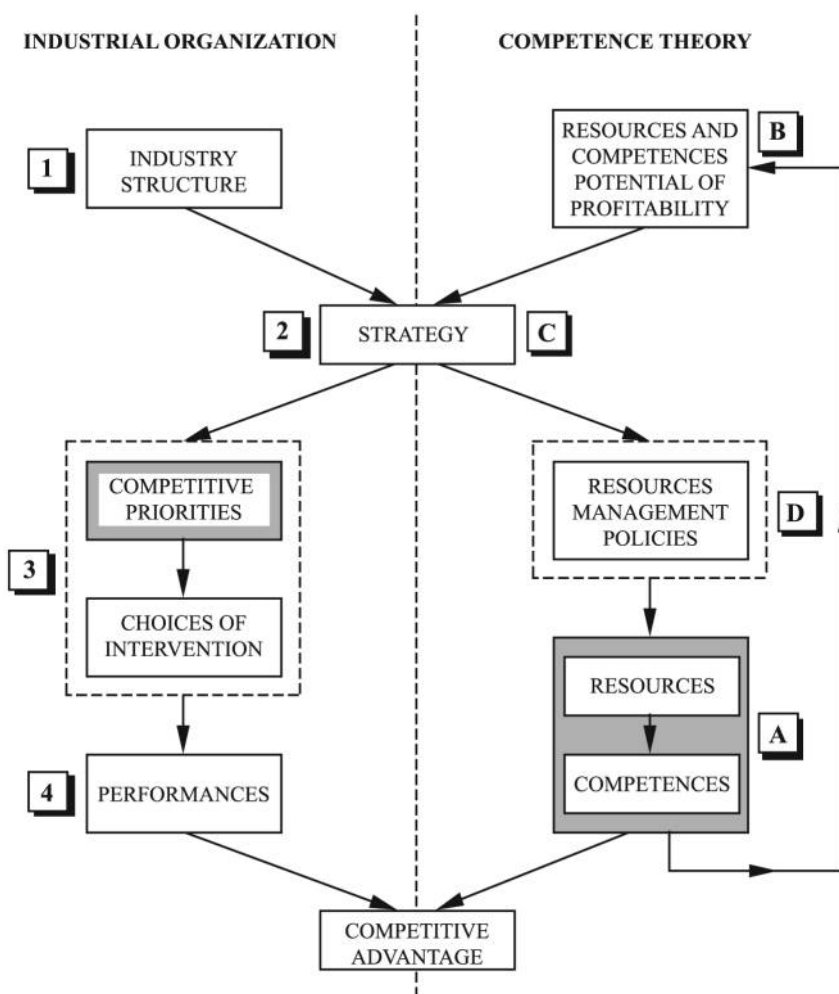
Nevertheless, firms in need of "certain resources" (capabilities) will have to use interfirm cooperation even when cooperation would be not justified from a traditional OE perspective (according to OE, cooperation is advisable only if it minimizes the cost of governing organizational activities) (Combs and Ketchen, 1999). This suggests the existence of resources/competencies not fully measurable in monetary terms, but that could make the difference.

The same father of OE, Williamson (1999), in his recent paper, sees "the relation between competence and governance (i.e. OE) as both rival and complementary – more the latter than the former, since some of the differences turn out to be more apparent than real ... governance is more microanalytic (the transaction is the basic unit of analysis) and adopts an economizing approach, whereas competence is more composite (the routine is the unit of analysis?) and is more concerned with processes (especially learning)".

### **A proposal for the integration of CT and IO**

The authors propose a framework for the integration of CT and IO (Figure 3). Starting from the two different concepts of the relations between strategy and competitive advantage, where the two approaches converge, they try to relate the various elements that distinguish the two theories, and to show the need to consider both to make a complete analysis.





**Figure 3.**  
Proposal for the  
integration of IO and CT  
by the joint analysis of  
competitive priorities  
and resources/  
competencies (in shaded  
boxes); the significance  
of strategy is evidenced  
by a dotted square

The two theories are presented separating the constituent elements and articulating them according to a sequential scheme of analysis. On the left Figure 3 shows the scheme characterising IO (sequence 1-2-3-4), on the right that characterising CT (sequence A-B-C-D).

The scheme of the strategic analysis according to IO resumes Porter's well-known sequence "structure-conduct-performance": the industry structure (1), that is, the competitive environment in which the firm operates, positioning itself within the market and with regard to the competitors, suggests and describes the firm's conduct or strategic decisions (2). These are realized in the selection of competitive priorities (3.1) (in other words, in the identification of the key success factors (KSF) of the industry) and in the fulfilment of the

intervention choices (3.2) most in keeping with the attainment of these competitive priorities. Even though representing both the competitive priorities and the intervention choices, the contents of a strategy are defined according to a sequence that first examines the definition of the competitive priorities and then the definition of the intervention choices. Then the conduct determines the firm's performances (4) and thus the competitive advantage.

The scheme of the strategic analysis according to CT (and Grant (1991) in particular[4]) can, on the other hand, be represented by the sequence: (A) analysis of the resources/competencies possessed (with the noted distinction between resources and competencies); (B) evaluation of their profitability potentials; (C) consequent definition of a strategy fitted to exploiting, valorising and consolidating them; (D) realization of that strategy using appropriate policies to manage the resources[5].

Hence 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, according to the virtual circle typical of the "learning organization" and recognizable in Figure 3 on the right.

Therefore, according to CT, the strategy cannot be translated as the definition of competitive priorities and choices of intervention (as in IO), but as the definition of the policies which are best suited to the management of the resources. The two different ways of seeing the strategy are evident in Figure 3 in the dotted squares.

The single elements of the proposed model are always related to the environment: the value of the performances or of the resources/competencies is not absolute but depends on that of the competitors, the competitive priorities (or KSFs) change according to the industry, the possibilities of intervention depend on the technology available and on the social-economic variables, the competitive advantage may not be sustainable in relation to changed environmental conditions, etc.

Having defined and articulated the constituent elements of the two theories, let us look which could be the possible points of contact.

Besides the strategy and the common objective of the competitive advantage, the link between the branch on the left (IO) and that on the right (CT) of Figure 3 is given by the comparison between competitive priorities (or KSFs) on one side and the resources/competencies on the other (both shaded to highlight this link): the IO model requires verification of the practicability of the competitive priorities considering the resources and competencies possessed. Likewise, the CT model which, for the acquisition, concentrating and conserving of the resources, needs confrontation with the KSFs present in the IO model.

In other words, the postulation of IO, which describes 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 analyzed the potential profitability of the resources/competencies available. Similarly the resources/competencies typical of a firm are of value not only if compared with the outside (industry or market) but also in relation to the competitive priorities selected by the firm.

In conclusion, both the competitive priorities and the resources/competencies are analyzed in two ways: in respect to the outside (the environment in terms of industry/market) and between each other.

In the link between competitive priorities (performances on which to focus) and resources/competencies may lie the key to surmounting much discussion on the theme of competencies and their strategic value, even though this relationship remains anything but clear, and scantily supported by empirical studies[6].

### **Implications for the decisional processes of management**

The model proposed in Figure 3, shows the two strategies, in terms of competitive priority/intervention choices and in terms of management policies regarding resources/competencies. It could be a valid help for managers during their decisional processes. Whether these latter concern the re-engineering of the portfolio of activities, or society acquisition/stripping, it is essential to have a twofold viewpoint: "external" (suggested by IO) and "internal" (suggested by CT) views in sight.

The two must, however, complement and enrich each other and this can take place through the confrontation between competitive priorities and resources/competencies. Consequently, in an operative logic, each manager must:

- analyze the suitability of the competitive priorities selected by his firm (and of the consequent choices/intervention levers) for the environment in which the firm operates;
- analyze the value of the resources/competencies possessed by the firm, not only in regard to itself but also to the environment (competitors and industries);
- verify if these competitive priorities are adequately supported by the resources/competencies possessed, and if necessary improve or manage them in a different way, or even modify the competitive priority; and
- verify the true values of these resources/competencies, which do not depend only on the comparison with the competitors, but also on their suitability for the competitive priorities selected.

Figure 4, which sets off the horizontal links present in Figure 3, shows the above-mentioned four moments. They are all equally important and worthy of consideration in the decisional process at the managerial level.

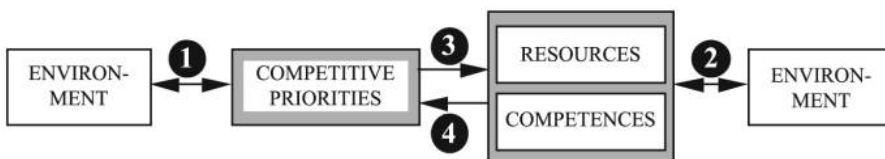
Then we briefly report some cases illustrating – in synthesis – firms that, in the ambit of their strategic planning, have emphasized certain of the preceding points.

In Benetton – the world leader in distinctive casual apparel – the initial managerial competencies of the upstream and downstream networks determine and support the choice and maintenance of the competitive priorities. In fact the firm’s competitive priorities (a “global” image highly characterized by “the colours”) are not only the result of strategic decisions linked to sector analysis, but, and above all, the exploitation and consolidation of resources and competencies accumulated over the years. These include the avant-garde supplying logics (both through the automated warehouses in Castrette and the “world wide” telematic connections) on one side, control of the raw material markets, raw material working and dyeing (the only two production phases that are not externalized, being key activities) on the other side.

The case of Benetton highlights how SWOT analysis could be interpreted in a real case as a form of integration between CT and IO respectively, though it could also be noted a sort of initial intuitious and a strong successive path dependency. The capabilities in logistics were born practically as a compelled choice, because of the small size of the firm at the beginning. Along the time, the Benetton family realized the potential of the other small firms in the Veneto region, for which Benetton’s firm assumed the role of coordinator. At the same time, it was understood that globalization was arriving and for acting a primary role on international markets it was necessary a strong integration both upstream (distribution) and downstream (about raw materials).

It is interesting to note that today’s many Benetton choices seem to be correct and rather expected, but it should be stressed its dynamic capabilities in anticipating the comprehension of competencies possessed and market requirements. For instance, after a long period during which many Benetton stores were in franchising, with many small shops all around the world, actually there were being created so-called “megastores” in crucial city locations directly controlled by Benetton.

In Aprilia – the leading motorcycle company, winner of 12 world racing championships – the internal competencies (mainly the capacity to “read” the market and the planning/product development capabilities) have not just an



**Figure 4.**  
Considerations on the  
competitive priorities  
and the  
resources/competencies  
in the decisional  
processes of  
management

intrinsic value but also one related to the competitive priorities selected by the firm, in particular flexibility and innovativeness. Aprilia delegates all the productive phases (with suppliers that are not exclusive, but linked to the firm even by low percentages, 20-30 per cent, of the productive volumes), and keep internal exclusively assembly (both of cycle and motor parts). The Noale firm can therefore operate with high flexibility on the market and at the same time concentrate its forces on planning and innovation activities.

Ivano Beggio, founder of Aprilia, realized that the competition with the four Japanese big ones (Honda, Yamaha, Suzuki and Kawasaki) could be not on high volumes but on an innovative product (though motorcycle seemed a real mature product) with a strong identity and image. For supporting this choice and fully deploying its craftsman's capabilities, Aprilia discover that a racing championship required a limited in number top engineers and technicians. At the same time, money investments were directed to racing and to construct that image of a competitive brand, instead of investing on large plants and equipment. As a consequence, it was born an Aprilia's network of manufacturers, able to provide modules and assemblies, and at the same time assuring flexibility in order to face market's dynamics.

The ADM (Add-Drop Multiplexer) equipment of Alcatel, produced in the Trieste factory, are surely the consequence of the particular competencies developed by the firm: mounting electronic components on the surface (upper and lower) of printed circuit plates is a competency able of differentiating them from competitors. However the potentials of this competency depend both on the prospects of the telecommunications industry (and in particular on transmissions on the synchronous networks) and the capacity to guarantee an adequate level of services to the customer (in terms of quantity and mix).

Alcatel realized that ADM technology could be adapted to many ICT applications, and should be kept separated from products, in order to achieve a market flexibility and to offer a strong service characterization. In particular, the recent dynamics in ICT sector have been faced exploiting a transversal technological capability (ADM) together with a shift toward electronic manufacturing services (EMS), that is operating in contract for original equipment manufacturers (OEM), owners of the market brands. In order to achieve maximum value from its own capabilities in a strongly dynamic sector, a choice was made to serve not only the mother company Alcatel but also Alcatel's competitors. In fact, for Alcatel and its competitors, the ADM technology is only a qualifying factor (though important), but not an order-winning one, and can be bought on the market. So the Trieste factory aims at exploiting its technological and service capabilities and that inspires its strategic choice, which at the same time has redirected the evolution of the plant in such a way to permit to sell product also to competitors of the mother company.

The cited cases highlight how successful strategic planning must be based on the joint considerations of competitive priority and resources/competencies, compared both with the external environment (industry/competitors) and each other.

## Conclusions

The theme of competency is a rich and variegated area of study, dealing with aspects of firm policy, management of human resources, management of technology, innovation, etc. In this article CT has been carefully analyzed, not as an end in itself, but within the ambit of present-day ideas regarding strategic management.

We started by analyzing the limits of the dominant approach – IO – which have often supplied the vital nourishment for the development and affirmation of CT. This theory, which in reality is a collection of principals can be traced back to various contributions generally summarized as RBV, CBC and DCV (whose differences have been dealt with), enters the much broader context of the evolutionary theories, integrates organizational economics transactions costs' approach, and together with the behavioural decision theory makes up a theoretical block which more than one author has seen as the antithesis of orthodoxy.

The article was intended to be critical even in regard to the new approaches, stating their inadequacies, so as to provide a thorough understanding of entrepreneurial success. In short, the need to integrate new and old theories emerges. This is much greater than the apparent incompatibility, so IO and CT must be considered together. Seeking the source of a firm's competitive advantage exclusively within the business in which it operates, or the resources it possesses, is limiting.

Integration, in any case, is not simple, seeing that the logical paths revealing strategy in the two cases are different, not only in terms of sequence but also the elements considered. IO places emphases on the industry and the competitive environment (competition, suppliers, market, etc.) and considers strategy in the classical sense, that is, as performance objectives to be reached and levers to activate in order to obtain them. In contrast, in CT, the strategy is, above all, the exploitation the resources possessed and the acquisition of missing ones.

Some authors limit themselves to upholding the complementarity of the two theories. Porter (1980, 1985), for example, (who sees in them the solution to the "transversal" and "longitudinal" problems, that is, from an analysis of the competitiveness at a given instance in time) and Amit and Schoemaker (1993) (who use them to explain the origin of competitive success, found in the specific characteristics of the firm and in the industry to which it belongs).

Others (like Mahoney and Pandian (1992) or Foss and Eriksen (1995)) look for the unifying concepts, such as "isolation mechanisms" (interpreted as



barriers to imitation at the level of the single firms, and as entrance barriers at the industry level) or “strategic propensities” (to imitate or differentiate itself from competitors by exploiting the fact of belonging to a certain industry, or distinguishing itself in regard to costs and times needed). Finally other authors highlight the firm’s external world in order to select resources and support development of specific competencies by the firm.

The authors of this paper believe more in an integrated approach, understood as relations between elements of the two theories. The performance objectives to be followed, or one could say almost “imposed” and derived deterministically from outside, cannot leave out resources/competencies, whether possessed or lacking, from an analysis. Likewise the value analysis and management of the resources/competencies cannot be separated from the environment in which the firm operates or from the competitive priorities which the firm has set for itself.

The link between competitive priorities (performances at which to aim) and resources/competencies is probably the key to settling the numerous discussions concerning competencies and their strategic value.

In conclusion, the new theme of firm’s competence is not a different way of strategic planning, but rather an additional instrument to be used alongside the traditional analysis.

#### Notes

1. The term “competencies” is at times reinforced as “core competencies”. Some authors, like Stalk *et al.* (1992), distinguish between “capabilities” and “core competencies”, according to whether these competencies are perceived by the customer or not.
2. For Grant, the competencies are comparable to the “organizational routines” of Nelson and Winter (1982): in a firm all the procedures, practices and ways of working that enable it to function (from production techniques and material management to human resources management, from policies of research and development to strategies for diversification and internationalization, etc.) are “organizational routines”. The “organizational routines” are the genetic inheritance of a firm (and not of single people or groups), so they determine its behaviour, they are lasting and inheritable, and are subject to selection in the sense that the better ones are destined to survive and perpetuate. The “organizational routines” were, in fact, born within the “evolutionary theories” of the firm (Barnett and Burgelman, 1996), but they have greatly influenced RBV.
3. The concept of causal ambiguity was introduced by Lippman and Rumelt (1982). Barney underlines the need for this same level of causal ambiguity both for those that try to imitate the strategy and those that implement it. Otherwise, once the causal mechanisms were known, they could be communicated to the outside. *Vice versa*, Reed and De Filippi (1990) hold that incomprehension of these mechanisms even by the management would lead to an incomplete usage of the competencies possessed. King and Zeithaml (2001) studied the relationship between causal ambiguity and resource inimitability, showing that, from one perspective, causal ambiguity enhances firm performance (because it severely limits imitation), while from another perspective, it may adversely influence firm performance (placing a constraint on the transfer and leveraging of the competencies within a firm).
4. “The essence of strategy formulation is to design a strategy that makes the most effective use of these core resources and capabilities” (Grant, 1991).

5. The scheme of strategy deployment according to CT must not be confused with the definition of “strategic competence”, formulated by some authors (Cleveland *et al.*, 1989; Vickery, 1991; Kim and Arnold, 1992); the latter case, in fact, simply concerns a “congruence” (“the goodness of fit between a company’s business strategy and the external competitive environment”), and the traditional approach “structure follows strategy” (Baker *et al.*, 1997) is still valid for those authors, though the competitive advantage is also influenced by “distinctive competencies”, which, for this reason, must be considered in the strategy making.
6. Though exclusively referring to manufacturing strategy, Schroeder *et al.* (2002) examine a strategy from the perspective of the resource-based view of the firm. Starting from the traditional consideration of manufacturing strategy as a set of competitive priorities, analyzing competitive advantage as measured by superior plant performances, it emerges that there is a clear linkage between performances and resources/competencies in terms of proprietary processes and equipment, at their time based on internal and external learning.

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