COMENTÁRIO

MICHAEL PORTER'S CONTRIBUTION TO STRATEGIC MANAGEMENT

A CONTRIBUIÇÃO DE MICHAEL PORTER À ADMINISTRAÇÃO ESTRATÉGICA

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Michael E. Porter is recognized as a leading authority on strategy and competitiveness. His works have generated analytical tools used by business schools, managers, and public policy makers: five-forces analysis, generic strategies, the value chain, activity systems, the national diamond and industry innovation clusters. Broader applications of Porter's analytical frameworks have included health care, non-profit organization strategy, economic development of inner cities, national competitiveness, clusters and innovation capacity, cross-industry linkages, environmental quality and competitiveness, and regional economic development (Institute for Strategy and Competitiveness, 2008).

Prior to Porter, strategic management rested on the SWOT framework – strengths, weaknesses, opportunities and threats – developed by the general management group at Harvard (Andrews, 1971). This approach involved checklists of factors to assess opportunities and threats in the organization's external environment and strengths and weakness in its internal environment. Although widely used, the SWOT framework lacked an analytical foundation. Other approaches such as Chandler's strategy and structure framework (1962) supplemented SWOT, drawing on business history to show how a firm's strategy and structure responded to changes in the external environment.

Porter's *Competitive Strategy* (1980) transformed strategic management in six ways. First, it applied microeconomics and industrial organization (IO) concepts to business level strategy to assess the attractiveness of an industry and positions within an industry. In the 1970s Porter had himself contributed to the IO literature, analyzing the relationship between firm performance and external factors including exit barriers, mobility barriers, branding, and market structure (Porter, 1976; Caves and Porter, 1977; Stonehouse and Snowdon, 2007). Second, the work turned the IO structure, conduct and performance approach on its head. IO had identified barriers that reduced competition at the industry level. The new work asked: how could managers manipulate mobility barriers to achieve above average returns? Third, it extended the analysis of competitive forces beyond immediate rivals to include the power of suppliers and buyers, the threat of new entrants and the attraction of substitutes. The relative power of these forces determined the attractiveness and average returns of an industry. Fourth, it outlined a set of generic strategies that could create a long run defensible position with superior returns in a given industry: overall cost leadership, differentiation and focus. Fifth, it proposed five generic industry environments – fragmented, emerging, mature, declining and global – to demonstrate how the level of industry concentration, the stage of the industry life cycle and the extent of international competition shape competitive forces and strategies. Finally, it explored the existence of strategic groups within an industry and their implications for strategy, showing that there was more than one way to be profitable in a heterogeneous industry structure. Rivals could succeed by competing along quite different strategic dimensions.

Beyond industry analysis, *Competitive Strategy* also offered insights on the scope of the firm, on game theory applications to strategy, and on competitor analysis. Chapter 14 on vertical integration explored both the advantages and disadvantages of backward and forward integration in different industry contexts. Chapter 4 on market signals (4) and chapter 15 on capacity expansion (15) applied game theory concepts to competitive strategy: credible threats, retaliation, commitment, reputation, trust, pre-emption, rational versus irrational stances, and signaling. The model for competitor analysis (chapter 3) explores how a rival's capabilities, assumptions, future goals and current strategy affect its response profile. The model includes the rival's current competitive strategy, but goes well beyond this to examine cognitive factors (assumptions of the rival), motivation (future goals) and resources (capabilities).

A number of debates have surrounded the five-forces analysis: whether it omits other relevant forces, whether it matters how industry boundaries are drawn, and whether it continues to be relevant in innovative and highly internationalized competitive environments. Nominees for additions to the five-forces have included government and "complementors": products or services to be used with the industry's product, such as fuel service stations for automobiles or software for video game consoles. While such additions are found in strategic management textbooks, Porter himself objected to adding a sixth or seventh force, arguing that complementors and government are not additional competitive forces, but rather factors that act through the original five forces: rivals, suppliers, buyers, new entrants and substitutes (Porter, 2008).

On whether it matters where one draws industry boundaries, Porter declared confidently in chapter 1 that this mattered little as the five-forces analysis would provide the needed tools to assess the attractiveness of any industry. Yet one might argue where one draws industry boundaries does matter in a world where innovation and falling trade barriers reveal new rivals, entrants and substitutes. Industry boundaries appear more porous and subjective currently than in the more stable protected industries of post-war national economies. The five forces analysis requires considerably more effort and skill to apply in a globalizing innovative context.

The industry structure approach to strategy, with its focus on the external environment, is often contrasted with the resource-based view of competitive advantage (Barney, 1991; Mahoney and Pandian, 1992) which represents the dominant framework for analyzing the internal strengths and weaknesses of the original SWOT framework. Proponents of the resource-based view argue firm-specific resources, capabilities and/or competences rather than generic strategies in a given industry structure are the true source of competitive advantage. Porter has criticized the resource-based view for its "nagging imprecision" (Stonehouse and Snowdon, 2007). It is true that the resource-based view suffers from not having a rigorous supporting subfield such as industrial organization offered competitive strategy. Yet Porter himself has contributed to internal perspectives on strategy with the value-chain and activity system concepts.

Indeed, Porter's contributions to strategic management have alternated between external and internal perspectives. *Competitive Strategy* (Porter, 1980) focused on industry structure in the external environment of the firm. The prescription to find attractive industry assumed the firm possessed the resources or capabilities needed to compete in that industry, or the financial resources to acquire a firm with the requisite capabilities.

Competitive Strategy (Porter, 1980) contains a strong claim about generic strategies that a firm risks getting "stuck in the middle" if it tries to pursue simultaneously a low-cost advantage and differentiation. Surprisingly, this claim does not appear to rest on analysis of industry structure, where one might indeed find firms that simultaneously offer high perceived value to consumers at relative low cost to the firm as Japanese automobile firms did in the late 1970s and early 1980s. Instead, "stuck in the middle" derives from Porter's analysis of the "different resources and skills" required for successful implementation of overall cost leadership – process engineering skills, low cost distribution, tight cost control systems, high capital investments - versus those required for differentiation strong marketing skills, product engineering, strong cooperation with marketing channels, strong coordination among R&D, product development and marketing, ability to attract creative people, and qualitative control systems (Porter, 1980).

Competitive Advantage (Porter, 1985), his second major work, had an internal perspective, focusing on the firm's value chain. It argued that the appropriate scope of the firm, which primary and supporting activities should be done internally and which should be outsourced or shared with other organizations, depended on whether the activities were essential for developing or maintaining the firm's competitive advantage. Those activities deemed central for competitive advantage needed to be owned by the firm.

In his third major work, *Competitive Advantage of Nations* (1990), Porter turned his attention again to the external environment, but also shifted his primary attention from what yielded above average returns for the individual firm to what factors made an industry competitive internationally. Whereas the 1980 work advised managers to seek an "attractive industry" with mobility barriers and avoid spoiling the industry by driving down profitability through vigorous competition, the 1990 work pointed to vigorous domestic competition as a vital factor

to achieve the quality and innovation an industry needed to compete internationally. Whereas government had been a background factor operating through the five forces in the 1980 work and whereas the assumption of a relatively stable industry structure left little to chance, in the 1990 work both government and chance were important supplementary factors in the "national diamond." The national diamond consisted of four key components: firm rivalry based on strategy and structure, related and supporting industries, input factor conditions and demand conditions. In the national diamond, government can play a positive role by stimulating competition, improving factor conditions - infrastructure, education - or by setting quality standards. Similarly, whereas knowledgeable customers wield power that reduces industry profitability in the five-forces analysis, sophisticated demanding customers foster innovation in the national diamond. Chance enters into the original factor conditions and into the timing of innovations. Governments have occasionally used the national diamond as a justification for industrial strategy, but Porter himself strongly objects to governments "picking winners" and argues governments can instead help improve factor conditions such as infrastructure or education or set quality, safety and environmental standards that have cross-industry benefits.

While the national diamond framework noted the competitive benefits of regional industrial clusters, Porter maintained that competitive advantage rests on integrating key activities within the firm rather than relying on alliances and other cooperative strategies. Capabilities developed internally were harder for others to imitate. Alliances involved risks of losing control over inside knowledge and posed challenges in strategic and organizational coordination with a partner with differing goals. Porter suggested alliances could be left to second-tier competitors struggling to catch up or used as temporary devices when an industry faced uncertainties of a major shift (Demers *et al.*, 1997).

In the article "What is Strategy?", Porter (1996) returned to an internal perspective focusing again on the competitive advantage of the individual firm. He argued that differentiation based on a unique constellation of activities offers a more sustainable basis for competitive advantage than a low cost advantaged based on improving operational effectiveness. These "activity systems" reflect deployment of a firm's resources to create a differentiated and difficult to imitate competitive position. Activity systems are therefore closely related to both the resource-based view and the 1985 value chain framework (Ghemawat et al., 1999). The article's claim that Japanese firms lacked competitive strategy and pursued only operational effectiveness, an advantage eroded by imitation, provoked debate and reflection among Japanese managers and policy makers. This led to the establishment of the annual Porter Prize for Japanese companies that have achieved superior profitability though a unique competitive strategy based on innovation in products or processes.

Internationalization and innovation have probably lessened the power of the five-forces analysis to provide clear guidelines for competitive strategy. Yet managers still need to be mindful of its applicability, and it can also help understand what has changed and what remains constant in industries undergoing transitions including globalization. Similarly, Porter's industry innovation clusters continue to be relevant for strategymaking in dynamic environments where learning and networks are important for developing competitive advantage.

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