THE RESOURCE-ADVANTAGE THEORY OF COMPETITION: IMPLICATIONS FOR AUSTRALIAN AGRIBUSINESS

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Executive Summary[1]

This paper summarises an emerging new theory of competition, contrasts the new theory with the 1980's view, and outlines the main implications for managers and public policy makers. This new perspective on competition is termed the Resource-Advantage (R-A) Theory.

The R-A Theory is grounded in empirical research which shows that variation between firms account for 45-58% of firm profitability compared with industry effects of around 8-10%. This means that the key strategic task of managers is to create and nurture the resources and core competencies of the firm, rather than simply to decide which industries to compete in.

The conventional wisdom in the 80's was that strategy was essentially about the fit between the firm and its environment. The R-A view, on the other hand, maintains that strategy is about creating core competencies and other strategic resources so that the firm can positively influence its environment. The successful firm is pro-active, not just reactive.

The new theory also points out that industry level analysis - as exemplified by Michael Porter's 5-Forces model - is not an appropriate tool for analysing individual firms.

In this paper, we show that the 80's perspective on using industry as the key influencer of firm profitability, and the inappropriate use of industry analysis at the firm level leads to a dialogue breakdown between managers and public policy makers concerned with competition, productivity and economic growth.

We also show that superior performance is a reward for meeting customer needs and may be complementary to public policy. Successful firms need not be apologetic. The paper concludes with the main implications for managers and public policy makers.

[1] *This paper was prepared as a result of a two-week visit to Monash University's Department of Marketing by Professor Shelby Hunt. During the visit Professor Hunt had the opportunity to interact with food industry leaders, Professor Allan Fels and some key staff of the Australian Competition and Consumer Association, and industry groups such as the Australian Food Council (Mr Mitch Hooke), the National Farmers Federation (Dr Wendy Craik), the Minerals Council of Australia (Mr Peter Waterman and the Pulp and Paper Manufacturers Federation of Australia (Mr Barry Jones). We thank the people for their time and input in assisting us draw out some of the key implications of the emerging Resource-Advantage Theory.*

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Introduction

Following a trough in the early 1990's, the study of business strategy is gaining momentum with new perspectives that are providing managers fresh insights into the nature of competition and sources of competitive advantage.

The two decades from 1965 to 1985 witnessed a period of major growth in the study of strategy, culminating in the popular works of Michael Porter in 1980 and 1985. However, during the late 1980's and early 1990's two features of the corporate landscape saw strategy pushed into the background.

The first was the perceived polarisation between strategy and implementation. During the heady 80's many firms conducted strategic retreats and workshops with the assumption of unlimited degrees of strategic freedom. Then, some influential management scholars, such as Henry Minzberg, began to challenge the whole notion of the strategic planning process. Implementation was seen to be the weak rung in the ladder to corporate success; the over-ambitious nature of the strategy was questioned.

The second feature, which was also related to the emphasis on implementation, was a pre-occupation with programs such as re-engineering, downsizing and rightsizing in response to globalisation and a more competitive environment.

Throughout this period, however, many business academics were quietly questioning the industry focus of the 80's view of strategy and encouraged shifting the emphasis back to the firm. This line of thinking, termed the Resource-Based View (RBV) of the firm, reached the attention of managers through the Harvard Business Review article 'The Core Competence of the Corporation" by Prahalad and Hamel in 1990. This body of work has expanded rapidly and is now at the stage where it provides new perspectives on the whole nature of competition and competitive advantage.

It is interesting to note that some of this latest work (Hunt, 1995; Hunt & Morgan, 1995) is by marketing academics and emphases growth and innovation through the creation of superior customer value.

In many ways the RBV of the firm and the associated Resource-Advantage Theory (R-A Theory) of competition are complementary to the industry oriented 80's view - and most authors are at pains to point this out. However, we argue that the R-A Theory in fact questions the most basic and familiar assumptions of how companies compete. For example, the 80's thinking was that strategy is essentially about the fit between the firm and its environment. The '90's view maintains that strategy is all about creating and developing core competencies so that the firm can positively influence its environment. Environment is still important but the successful firm is pro-active, not just reactive.

To most managers this is commonsense; they have always seen their role as nurturing the resources of the firm. Resources which form the foundation of a sustainable competitive advantage are those which can not easily be purchased, are difficult to imitate and are not readily substituted by competitors. These resources are not readily tradeable. They include complex human resource systems within the corporation and relationships with customers and suppliers.

But it is important if industry, when trying to communicate with public policy makers who set the rules of the competition, base their arguments on a framework that has little relevance to modem economies. Business must view their activities as complementing the public good. Firms are rewarded because they deliver superior value.

The purpose of this paper therefore is to summarise the development of strategic thinking over the past decade and to contrast the emerging R-A Theory with the situation in the mid 80's. Implications for managers and public policy makers are drawn.

We believe this is timely as most managers recognise that no matter how efficient the organisation is as a result of re-engineering type endeavours, there is still a need for strategic direction and growth. The R - A Theory, we believe, will provide a useful foundation for more effective dialogue.

Strategy In The'80's: Industrial Organisation Economics

Business strategy in the 1980's was dominated by Harvard Business School's Michael Porter. Indeed it is rare to visit an Australian food industry CEO's office and not to find a copy of his "Competitive Advantage" book on the bookshelf. Porter's analysis has its roots in Industrial Organisation IO economics which is a long, standing branch of economics concerned with consumer welfare and the maintenance of intra-industry competition. The focus was clearly on the industry as the key determinant of firm profitability as expressed in the structure-conduct-performance (S-C-P) maxim: industry structure determines conduct which determines profitability.

Porter's brilliance was that he turned IO economics upside down and expressed it in a form easily understood by managers. If we know how to maintain and encourage intra-industry competition, then we also know the secrets of how to achieve monopoly profits by discouraging and circumventing it legally.

The underlying assumption that the characteristics of the industry were the key drivers of firm profitability led to the notion that the key challenge of strategic planners is to manage the fit between the firm and the external environment. The quest was to gain a competitive position and superior performance with the consequence of obtaining a monopoly position and earn monopoly rents in the long run. Barriers to entry and exit are important features of this industry landscape. Industries could be subdivided into different strategic groups with mobility barriers constraining movement across groups.

The key role of managers was to choose which industries to compete in, and which strategic groups to be a part of. The firm was portrayed as an entity with discrete boundaries and unlimited degrees of strategic freedom.

As Porter himself points out, his 5-forces model is useful for analysing industries, but is not appropriate for analysing firms. In fact, industry's use of the Porter model at the firm level during the 80's was not only inappropriate for firm level strategy development, but it has contributed to a breakdown in dialogue between industry and competition policy makers.

The policy maker's use of Porter's model at an industry level was really in line with what Porter intended. But business using it at firm level gave the impression of using the same framework, yet the discussion was at cross-purposes. Furthermore, industry was using an inappropriate tool for firm level analysis and hence could not effectively put their case across.

Porter's 5-forces model creates the impression of the firm as not only competing against current and potential competitors, but their customers and suppliers as well. Applying the Porter model at the firm level creates an overwhelming impression that competition is a zero-sum game and that firm profitability depends on developing a position of power over suppliers, customers and competitors.

Among the many problems is that this pits managers against competition policy makers. It implies a win-lose game between consumer welfare and superior firm profitability. And it is pretty hard for business to win their case when their whole line of reasoning was in fact developed by economists who believed businesses were (are) the baddies in the game. Firm profitability comes at the expense of consumer welfare.

By the late 1980's however it was clear that firms were pursuing a different agenda. There was recognition that business systems and not just individual firms create customer value and that the focus of competition was system against system.

The rise of strategic alliances and joint ventures - as an example of the kind of resource that is not readily tradeable - illustrated that companies need to cooperate in order to compete. It is difficult to comprehend that Compaq Computers did not even exist in 1980, and yet in 1994 it is challenging IBM for world leadership in personal and laptop computer (Prahalad and Hamel, 1994). The core of Compaq's strategy is cooperation within. the system -the system can compete because of the cooperation between the channel players.

Various streams of business academic research were trying to keep up with these new realities.

One related to the functioning of value creation systems and relationship management and different modes of governance. Another was concerned with new perspectives of the firm, termed the Resource-Based View (RBV) of the firm.

The RB View and the associated Resource-Advantage (RA) Theory of competition provides a totally new perspective on the nature of competition, and, most importantly, one where the interests of the firm and their consumers are aligned.

Empirical evidence is firmly on the RB View side. A number of studies have shown that industry accounts for 8-10% of firm profitability and firm effects account for 45-55%.[2] Thus the two views are complementary in that both the firm and the industry do contribute to firm performance, but the firm side is about four to five times as important. Industry is simply not the appropriate unit of analysis given the magnitude and consistency of these findings.

Strategy in the '90's: The Resource Advantage View

The swing back to the firm, and not the industry, as the key determinant of profitability is based on the view that superior performance and a sustainable competitive position depends primarily on the resources of the firm. The key challenge for managers is to transform basic resources into core competencies, which form the foundation of superior competitive positions m specific market segments. The basic idea is that it is resources that are difficult to imitate and substitute that are the basis for superior performance. These resources are embedded as core competencies within the firm. They are developed, not acquired, and hence have low tradeability.

It is important to note that core competencies improve with use, and are less subject to depreciation, making them a source of sustainable competitive advantage.

At the extreme, the most effective barrier to imitation is when competitors do not understand the competencies on which the advantage is based. Termed causal ambiguity. this reflects the ambiguity between the causal connections between actions and results.[3]

We have referred to Harvard Business Review articles in this paper as they tend to signal the acceptance of academic streams of research to business practitioners and consultants. Usually however, the thinking has been well developed and published in academic journals. See the References for sample of these.

[2] For example, Hansen and Wenerfelt, Rumelt.

[3] An extreme form of causal amiguity is where managers in a high-performing firm are themselves unclear about the strrategic and organisational factors associated with their success. Such firms are liikely to be the

Resources that are likely to form the foundations of core competencies are generally related to the learning capacity of the organisation. These include culture and the management of internal and external relationships. Comments such as "the ability to learn faster than your competitors may be the only sustainable competitive advantage", reflect the importance of organisational culture and climate within a marketing orientation.

The RBV has been used to explain firm diversification and corporate financial performance (Robins and Wiersema, 1995). A RB analysis of relatedness between different business units of a multi-business firm provided superior explanation to a concentric index and an entry index from IO economics. In a similar study Markides and Williamson (1994) found that resource based strategic relatedness is superior to market relatedness in predicting the performance of diversified firms.

Marketing academics Hunt and Morgan (1995) further developed the RBV of the firm into a theory of competition termed the resource-advantage theory (R-A Theory) of competition.

Figure 1 outlines this theory, which places emphasis on market segments, heterogenous firm resources, a comparative advantage (disadvantage) in resources and marketplace positions of competitive advantage (disadvantage).

Figure 1: Relationships between R-A Theory and Industry Competition

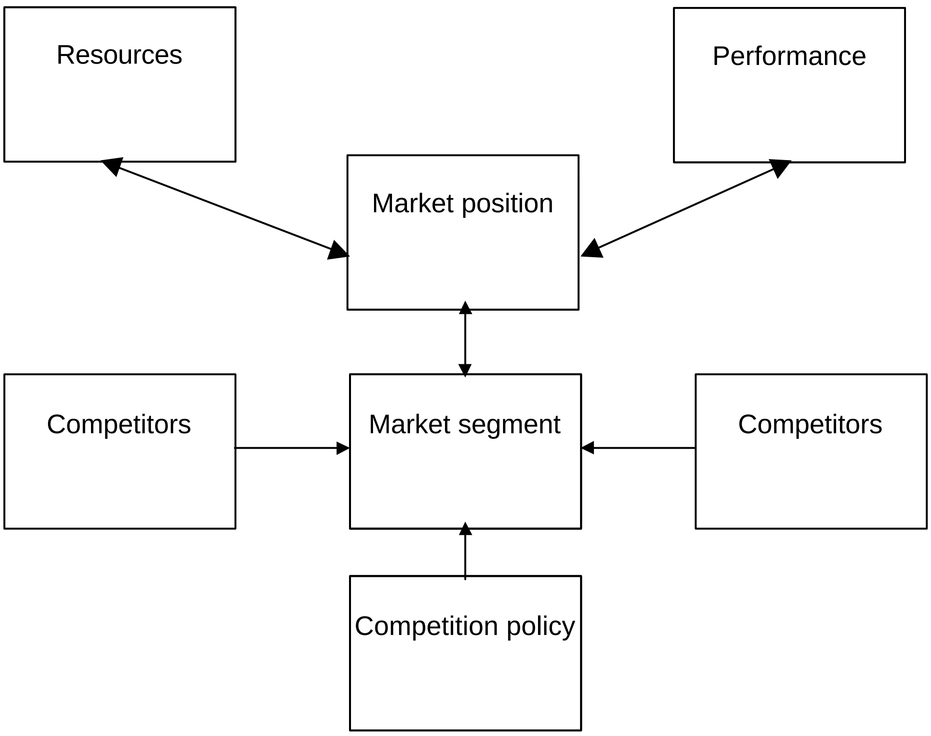

Figure 1, which is based on Hunt's work, shows that the competitive environment and the nature of competition between the firm and its competitors does influence the resource development process. Thus it is not correct to state that competition policy is only concerned with competition and not competitive advantage. The nature of competition, as established by competition policy, will influence resource accumulation and hence the competitive advantage of individual firms.

This diagram also illustrates the interrelationship between consumers at the segment level and the firm's market position.

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most difficult to imitate and attempts to accelerate duplication of their strategy by recruiting key staff will fail.

It is important to note that figure 1 also suggests that competition policy, with its industry level orientation, does not develop an understanding of how a superior market position - the application of firm resources to create value for specific customer segments -is developed.

Hunt emphasises that this competitive cycle is best understood by starting with the feedback loop from relative financial performance. Firms learn from their relative performance which signals their relative market position which results from the quality of their resources. Since the competitive cycle begins with relative financial performance, culture, both national and organisational, influences the choice of performance measures. Culture matters.

Competition is viewed as a process that focuses (similar to Porter, 1985) on marketplace positions of competitive advantage. Sustainable advantage is achieved if:

- firms continue to invest and accumulate the resources that led to advantage

- rivals fail to imitate these resources because they are protected by patent or are causally ambiguous, are socially complex and/or exhibit time depression diseconomies.

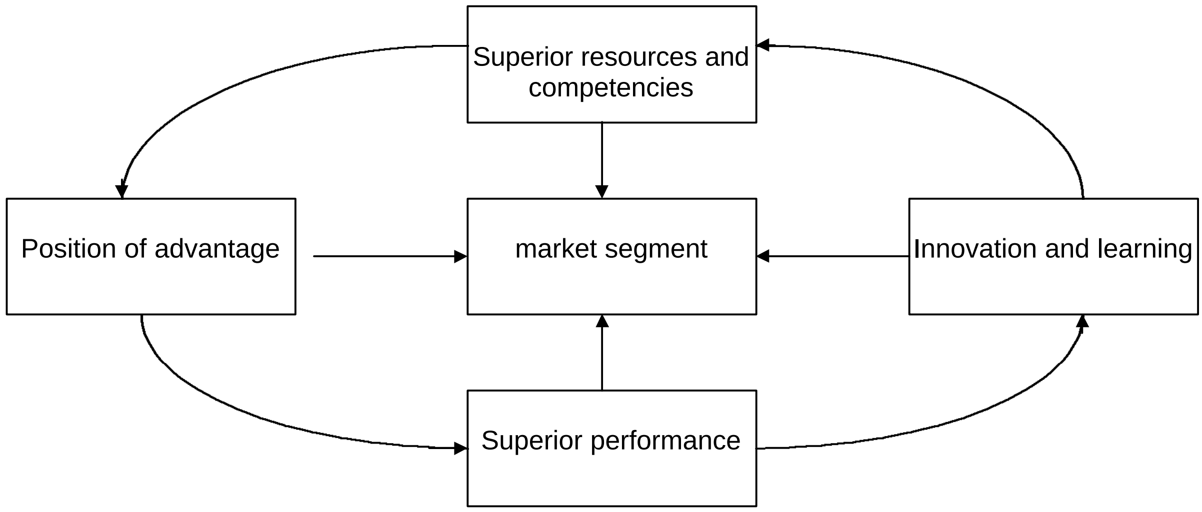
Under this view, competition is dynamic, with disequilibrium., not equilibrium, the norm. It is more fruitful to think about firms and competition as biological systems, than static economic theory with its emphasis on equilibrium allows. Systems are co-evolving (that is, private and public institutions, firms and resources are all evolving) making it impossible to achieve equilibrium- Innovation creates disequilibrium and is the most important source of competitive advantage. At the same time innovation is also the result of competitive processes. [4]

Innovation is a critical source of competition and growth. Innovation may be a core competence of an organisation. and hence it is endogenous to the firm

Figure 2 summarises the superior performance cycle of successful firms.

[4] We use innovation in a broader, rather than narrower sense, including processes as well as outcomes. Such a broad interpretation of innovation involves scientific, technological, organisational, financial and commercial activities: innovation is a continuous process characterised by feedback and interaction at all stages in the value chain.

Figure 2: Superior Performance Cycle



Differences Between IO and R-A Theory

The fundamental differences between the two perspectives can be best understood by contrasting their underlying foundations towards "perfect" competition. In economics, perfect competition is the ideal state, when all firms make just enough profit to remain in business. This derives from the assumption of homogenous resources, hence the only way a firm can make superior profits is through "anti-competitive" behaviour which comes at the expense of consumers.

Under R-A Theory on the other hand, perfect competition is a special case and a form of market failure, which would arise under conditions of homogenous demand and supply, coupled with a standard production function (that is, the conditions of perfect competition). The following conditions will result:

- innovation will cease
- productivity gains cease and
- economic growth stops

Perfect competition, rather than being perfect, is to be avoided at all cost. Fortunately, this is usually the case in modern economics with heterogeneous demand, supply and firm resources. Under these conditions, firms have the incentive to develop resources, provide superior value to specific customer segments and are rewarded through superior performance.

The competitive process for specific customer segments results in innovation, productivity gains and economic growth.

Table 1 summarises the key dimensions and assumptions behind the '80's and '90's views. It is important to note that the R-A Theory, with its assertion that industry is of secondary importance to firm profitability, also maintains that:

- entry barriers
- industry concentration
- market share "power", and
- strategic group membership

have limited relevance.

What is important is the firm's ability to develop core competencies that are so embedded in the organisation that they are causally ambiguous, inimitable, not tradeable, not easily substitutable and important to specific customer segments. This is the key secret to sustainable competitive advantage, and brings in dimensions such as the learning organisation, a market orientation, and firm culture and climate.

The purpose is not to create barriers to entry, but rather an appropriate alignment of rewards for creating value and innovation.

Table 1: Perspectives on Competitive Strategy

	1980's view	**1990's view**
External unit of analysis	industry	market segment
market definition	industry wide definition of market	market definition is only relevant at the segment level
consumer-firm relationship	win-lose battle among firms, and between firms and consumers	win-win and creation of superior value
key strategy challenge	industry-firm fit	organisational learning to develop key resources and competencies
management's main task	portfolio analysis and resource allocation	resource creation and development
main profit influencers	industry concentration and market power	delivering superior value to the customer
the ideal outcome	monopoly position	superior financial performance
achieved by	barriers to entry	distinctive competencies causally ambiguous resources

The '90's view of competitive advantage also emphasises the importance of collaboration and cooperation as critical dimensions in the competitive battle and the development of resources. The Strategic Industry Research Foundation's Food Manufacturing Roundtable is an excellent example of how firms can cooperate to develop resources more effectively than they could working in isolation. This effective resource development activity in turn enhances the competitive position of each firm in a global market. The SIRF Roundtable also introduces resource development at a regional and state level. This paper is largely concerned with the firm, but the same logic applies at a regional level; cooperation to develop resources can assist the international competitiveness of a group of firms.

The main differences in emphasis, and the complementary nature of the two perspectives are further summarised in graph 1 in the context of the continuum from commodities to differentiated products. The graph shows that:

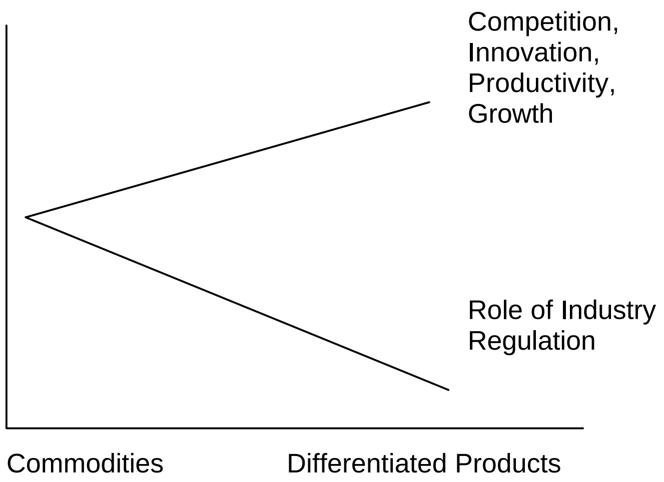
- R-A Theory has increasing relevance as the degree of product differentiation increases

- innovation, productivity gains and growth are also directly related to the degree of product
- differentiation (Research on the Danish food industry by Sogaard supports this conclusion).

- similarly the level of competition intensifies under conditions of differentiated products and segmented demand

- it therefore follows that the role of the regulator and need for the public industry regulator is likely to decline the greater the degree of product differentiation.

Graph 1: Complementarily Between R-A Theory and IO Economics



The level of innovation, productivity gains and economic growth increases as the food industry moves from a commodity to a differentiated product orientation and the need for the role of the industry regulator declines.

Managerial Implications

Given that this is a new theory, the following are initial comments only, but suggest that the R-A Theory does offer a different perspective. We are currently working on developing a better understanding of the public policy and managerial implications within an Australian context. We would welcome any input into this process.

The main managerial implications are:

1. Using Porter's industry level analysis at the firm level is faulty. The twin dangers are, firstly, that managers may take their eye "off the ball' of creating and nurturing firm resources. And secondly, they have an inappropriate foundation for presenting their case to public competition policy makers. The R-A Theory provides a rigorous and appropriate base for presenting the firm relevant position.

2. Traditional industry based notions of competitive advantage such as:

- entry barriers

- industry concentration

- market share "power"

- strategic groups membership

are generally not critical to superior firm performance.

3. Firms should not feel guilty about superior performance. Figure 2 shows that superior performance is generally the result of creating and investing in resources that support value creation for consumers. Superior performance is a reward from customers.

4. The firm is the most important and sustainable source of competitive advantage. Organisational learning and innovation are largely influenced by the choice of performance measures. Appropriate performance measures, with targets and action plans should be developed to support key areas such as:

-- financial
-- customer
-- internal processes
-- learning and
-- innovation.

5. Marketing as a boundary-spanning activity becomes critical in understanding the market and relating it to the firm's resources and competencies. In other words, an understanding of the customer will lead to superior performance. A market orientation is an organisational response to customer needs that can be satisfied with the firm's resources and core competencies. A marketing orientation has little to do with the marketing department per se; it is the response of the total organisation.

6. Managers and analysts should not be preoccupied with supposedly optimum strategies for specific industries. For example, there appears to be an assumption that Australian food industry firms need to compete on a branded product basis against the multinationals. The R-A Theory proposes that firms should develop strategies arising from their unique resources.

7. The true sources of innovation and productivity growth are to be found in competition. Innovation is stimulated by the need to have a superior competitive position in the market place. Innovation is likely to be highest in highly differentiated market segments.

8. Firms can cooperate to compete more effectively. Cooperation should focus on developing resources more effectively and efficiently and delivering unique benefits to consumers.

Public policy implications

1. Industry analysis, while informative, is not the critical unit of analysis, firm are.

2. Price collusion does not lead to the creation of resources and is a legitimate concern for industry regulators.

3. The resource accumulation process that leads to a resource advantage for the firm (nationally or internationally) should be encouraged. Mergers and take-overs may create resource advantage and should not be viewed *prima facie* with suspicion.

4. The choice of performance - which is at the very core of the competition and innovation cycle - is not independent of national culture. Therefore industry regulators have to make clear choices of the performance measures to be used for maintaining industry competition. These have to be justified to harmonise business and public interest.

5. Stimulating domestic competition, may need to be balanced with permitting international competitiveness of Australian enterprises because resources and competencies have become highly mobile leading to the creation of global. markets.

6. Competition policy has a direct impact, not only on performance, but also on resources and competitive advantage. The four dimensions (see figure 2) interlinked as postulated by the resource advantage theory by recognising the possibility of feedback mechanisms. Any public policy instrument - such as innovation or competition policy - that has an impact on any of the following:

- resources and competences
- position of competitive advantage
- performance
- innovation

…immediately influences the other dimensions.

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