Theoretical Developments in the Field of Strategic Management

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Thank you

- Prof. Dr. Rudi Bresser
  - Theorie und Praxis des Strategischen Managements
- Prof. Dr. Thomas Mellewigt
- Dr. Ingo Weller
Theoretical Development in Strategic Management: Outline

1. What is Strategic Management?
2. What is Strategy?
3. Early Development
4. Industrial Organization Economics
5. Transaction Cost Economics
6. Agency Theory
7. Game Theory
8. Resource Based View
9. Relational View
10. Dynamic Capability Perspective
11. Some Comments on Methodology
What is Strategic Management?

- Strategic Management is the attempt to explain and predict inter-firm performance differences (competitive advantage) using the scientific method.
What is Strategic Management?

- Explaining and predicting inter-firm performance differentials, example:
  - Why is VW outperforming all the other car manufacturers (stock returns 12/07-10/08)?
    - VW +87.1%
    - Audi –22.1%
    - BMW –43.1%
    - Ford –56.0%
    - Porsche –60.0%
    - Mercedes –62.4%
    - GM –70.1%
What is Strategic Management?

• Explaining and predicting performance differentials, example:
  • Why is Michael Phelps outperforming everyone else?
What is Strategic Management?

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Strategic Management

- Strategy Process
  - Where do strategies come from?
  - How are strategies formulated?

- Strategy Formulation
  - How shall we compete to gain competitive advantage?

- Strategy Implementation
  - How do we change the organization to make the strategy work?
What is Strategy?

- Strategy is the managerial application of findings from research in strategic management
  - University courses
  - Basic research
    - Academic journals
  - Applied research
    - Practitioner journals
  - Consulting firms
What is Strategy?

- Strategy is about gaining and sustaining Competitive Advantage
What is Strategy?

- Strategy is the managers’ theory of how to gain and sustain competitive advantage (Drucker, 1994)
- Strategy is the creation of a unique and valuable position, involving a different set of activities (Porter 1996)
  - Generic strategies
    - Low cost, differentiation, niche
  - Trade-offs
- A strategy is an integrated and coordinated set of commitments and actions designed to explore core competencies and gain a competitive advantage (Hitt, Ireland, Hoskisson 2008)
What is Competitive Advantage?

- A firm has a CA when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors (Barney 1991)
- A firm that outperforms its competitors has a CA
  - CA = superior performance
  - ALWAYS RELATIVE
Competitive Advantage

- Competitive advantage
  - A firm’s profitability/value creation is greater than the average profitability/value creation for all firms in its industry
- Sustained competitive advantage
  - A firm maintains competitive advantage for a number of years
Early Development
Early Development

- Emphasis on normative aspect
  - Identifying “best practices”
- Impossible to generalize
  - Each organization/situation is unique
  - Skeptical about the contribution of other academic disciplines (e.g., psychology, economics) (e.g., Learned, Christensen, Andrews, and Bower 1965)
- Only Method: Case studies (HBS)
  - Taught by retired executives (not Ph.D.s)

Prof. Bresser,
Associate Editor

Prof. Mellewigt,
Editorial Board Member
Industrial Organization Economics
Industrial Organization Economics

- Structure-Conduct-Performance (Bain, 1956)
- Firm performance is primarily a function of the industry in which it competes (Porter, 1980)
Differences in Industry Performance
Return on Invested Capital in Selected Industries

![Graph showing differences in industry performance withReturn on Invested Capital in Selected Industries. The graph displays data from 2002 to 2006 for industries including Air transport, Computer software, Drug, Hotel/gaming, and Retail. The graph indicates varying trends across different industries over the years.](image)
Industrial Organization Economics

- **Strategic Coherence Fit**: Superior performance requires coherence, or fit, between business model (competitive strategy and organization architecture) and industry
- But: It’s a STATIC Fit
Strategic Groups

- Vexing problem: Firm heterogeneity
- Strategic groups defined as a group of firms in the same industry following the same or similar strategies (Caves and Porter, 1979)
  - Mobility barriers
Strategic Groups

- **Proprietary Group**
  - Aventis
  - Eli Lilly
  - Merck
  - Pfizer

- **Generic Group**
  - Me Too I
  - Me Too II
  - Me Too III

- **Prices Charged**
  - High
  - Low

- **R&D Spending**
  - High
  - Low

- **Mobility Barriers**
  - R&D Spending vs. Prices Charged
Strategic Groups

- **Critique** (Barney & Hoskisson, 1990)
  - Do strategic groups exist?
  - Does firm performance depend on strategic group membership?
Competitive Dynamics

- Competitive dynamics
  - Explicit recognition of firms strategic interactions
  - Hypercompetition (D’Aveni, 1994)
  - Market commonality & resource similarity (Chen, 1996)
    - Airline industry
- Methods
  - Deductive (often based game theory)
  - Large-scale econometrics studies
- More scientific and positivist approach
Transaction Cost Economics
Transaction Costs Economics

- Williamson (1981) derives transaction costs approach from three independent literatures
  - **Economics**
    - boundary of the firm (Coase, 1937)
    - economic adaptations (Hayek, 1945)
  - **Organizational theory**
    - purposive organization & bounded rationality (Barnard, 1938; Simon, 1947)
    - core technology, domains of organizations, power & limit of market and hierarchy (Thompson, 1967)
  - **Contract law**
    - hard vs. soft contracting (Llewellyn, 1931; MacNeil, 1974)
Transaction Costs Economics

- Transaction costs occur when a good or service is transferred across a technologically separable interface (Williamson, 1981)
  - Production cost
    - technology and steady-state production cost
  - Governance cost
    - cost of planning, adapting, and monitoring task completion

- Behavioral assumptions:
  - Bounded rationality
  - Opportunism
  - Small numbers
  - Asset specificity
Transaction Costs Economics

- Critical dimensions for describing transactions:
  - Uncertainty
  - Frequency of transactions
  - Degree to which durable, transaction-specific investments are required
- Implicit assumption: Firms can make or buy at their discretion
- Critique (Ghosal & Moran, 1996)
  - Inconsistency in internal logic
  - Firms are knowledge communities (Kogut and Zander, 1992)
  - May create self-fulfilling prophecy for managers
Agency Theory
Agency Theory

- Based on game theory of imperfect information between players (i.e., principals and agents)
  - Divergence of interest between shareholders (principals) and managers (agents)
  - Increasing utility of agents comes at the expense of decreasing utility of principals
    - Power and perks
    - On the job consumption
      - Corporate jets
      - Corporate vacation homes
      - Corporate maid service in private homes
      - Relocate head quarters to Pebble Beach, CA, next to golf course
Agency Theory

- Central question:
  - What are mechanisms (e.g., government structures, contract designs) that can minimize agency costs, which arise from the divergence of interests? (e.g., Fama, 1980)

- Strategic management adopt positivist agency theory (Hoskisson et al., 1999)
  - Jensen & Meckling (1976) integrate literature on property rights, agency, and finance to develop a theory of ownership structure for the firm
  - Firm is a “Nexus of Contracts”
Institutional Theory
Institutional Theory

- **Central question:**
  - Why do organizations become more alike in structural and procedural features?

- **Isomorphism**
  - A constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions (Selznick, 1949; Hawley, 1968; DiMaggio and Powell, 1983)
    - Legitimacy, reputation, power, and status
    - You have to look like the others in these positions….
Institutional Theory

- **The main drivers of isomorphism** (Meyer & Rowan, 1977; DiMaggio & Powell, 1983)
  - Need for power
  - Legitimacy
  - Social fitness
    - less driven by efficiency

- **Mechanisms of institutional isomorphic change** (DiMaggio & Powell, 1983)
  - Coercive
  - Mimetic
  - Normative

- Cannot explain firm differences – does the opposite
Resource Based View
Resource Based View

- RBV attempts to explain firm performance differentials based on a firm’s idiosyncratic resource endowments
  - Resource perspective gives a different insight than the product perspectives in traditional economics or product portfolio theory (Wernerfelt, 1984)
- Firm resources
  - “all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc., controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness” (Barney, 1991)
Resource Based View

- Firm resources provide competitive advantage (Barney, 1991) when they are
  - Valuable
  - Scarce
  - Inimitability
  - non-substitutable

- Critique (Priem & Butler, 2001):
  - Tautological: “Value” is determined only ex post
  - Difficult to do empirical research based on RBV constructs
    - What are your predictions *ex ante?*
Distinctive competencies shape the functional-level strategies that a company can pursue.

Function-level strategies can build resources and capabilities to enhance a company’s distinctive competencies.
Porter: Its activities, not resources!
Porter: Its activities, not resources!

e.g., Wal-Mart’s Business Model
Relational View
Relational View

- Alliances or networks allow firms to develop relationships that can result in sustained competitive advantage (Dyer & Singh, 1998)
  - Smart car by Mercedes and Swatch

- Relational rent generating process
  - relation-specific assets
  - knowledge-sharing routines
  - complementary resource endowments
  - effective governance

- Where is the locus of competitive advantage?

- Collective vs. cooperative strategies (Bresser, 1988)
Relational View

- Inherent empirical challenge to measure alliance contribution to firm performance (Gulati, 1998; Lavie, 2007)
  - Firms do not report quantitative measures of alliance performance in financial reports
  - Performance from alliances is often confounded with firm’s internal operations
- Overcoming the challenge:
  - Project-level outcomes
  - Examination of attributes of network structure (e.g., Rothaermel and Deeds, 2006)
Dynamic Capabilities Perspective
Dynamic Capabilities Perspective

- Dynamic capability is a “firms’ ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece, Pisano, Shuen, 1997: 516)

- Dimensions of firms’ dynamic capabilities
  - **Process**: Coordination/integration, learning, and reconfiguration
  - **Position**: Current specific endowments of technology, IP, complementary assets, customer base, and its external relations with supplier and complementors
  - **Path**: path dependencies, technological opportunities
Dynamic Capabilities Perspective (cont.)

- Eisenhardt and Martin (2000: 1107) define dynamic capabilities as “the firm’s processes that use resources—specifically the processes to integrate, reconfigure, gain and release resources—to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die.”

- Helfat, et al.’s (2007: 4) define dynamic capabilities as “the capacity of an organization to purposefully create, extend, or modify its resource base.”

- “How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization” (Schreyögg and Kliesch-Eberl, 2007, FU Berlin)
Where do dynamic capabilities come from?

Source: Hess & Rothaermel, 2008
VIELEN DANK!

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Methodology
The problem of unobservable in strategic management research (Godfrey & Hill, 1995)

- Positivists vs. Realists
- Unobservable constructs lie at the core of a number of influential strategic management theories (e.g., TCE, RBV, DCP, etc)
The problem...(cont.)

- Realist solution:
  - Identify what the observable consequences of unobservable resources/capabilities are likely to be.
  - “what scholars need to do is to theoretically identify what the observable consequences of unobservable [constructs] are likely to be, and then go out and see whether such predictions have a correspondence in the empirical world. The analogy here is with quantum mechanics, which has been confirmed not by observing subatomic entities (since they are unobservable) but by observing the trail left by subatomic entities in the cloud chambers of linear accelerators” (Godfrey and Hill, 1995: 530)
Methodology

- Formal theory
- Qualitative studies
  - Inductive theory building
- Quantitative studies
  - Deductive theory testing
- Simulation
- Experimental Design
Methodology: Formal Theory

- Pros: Internal consistency, ensures logically coherent argument
- Cons: Can be oversimplified because of the need for clear prediction and attenuate the difficulty of finding mathematical solution
Methodology: Formal Theory

Multimarket Oligopoly: Strategic Substitutes and Complements

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A firm's actions in one market can change competitors' strategies in a second market by affecting its own marginal costs in that other market. Whether the action lowers or raises marginal costs in the second market depends on (a) whether it increases or decreases marginal costs in the second market and (b) whether competitors' products are strategic substitutes or strategic complements. The latter distinction is determined by whether more "aggression" (e.g., lower price or higher quantity) by one firm in a market lowers or raises competing firms' marginal profitability in that market. Many recent results in oligopoly theory can be most easily understood in terms of strategic substitutes and complements.

I. Introduction

There are two main points to this paper. First, changes in a firm's opportunities in one market may affect its profits by influencing its

Methodology: Qualitative Studies

- **Pros:**
  - Can stimulate new theoretical insight

- **Cons:**
  - Usually limited generalizability since conducting large number of case studies are costly
Methodology: Qualitative Studies

Dynamics of Social Capital and Their Performance Implications: Lessons from Biotechnology Start-ups

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Based on comparative longitudinal case analyses of six new biotechnology firms, this paper explores how the configurations, management, and evolution of entrepreneurial firms' social capital affect firm performance. Findings suggest that firms can realize performance benefits when their members repeatedly adapt the configuration of their social capital to changing resource needs, while inertia hinders a firm's social capital into a liability. Our research provides a dynamic view of the conditions and processes that produce such inertia, allowing firms to overcome it, and develop a firm's social capital to organizational advantage. A core theoretical contribution of our study is to identify and theorize how the internal organization of firms' management of relationships with external partners, through horizontal and vertical differentiation and integration, affects the dynamics of firms' social capital, adaptive capacity, and performance.

The importance of social capital for the founding, survival, and success of entrepreneurial firms in general, and new biotechnology firms in particular, has been widely acknowledged and demonstrated empirically (Liñan, 1996; Penning, Lee, and van Witteloostuijn, 1996; Zaheer, Doh, and Breene, 1999; Oliver, 2001). Although social capital has been defined in a number of ways, the core intuition behind the notion is that it signifies an asset available to individual or collective actors that allows for their actions or positioning in a social network and/or the context of these actors' social relations (Staber and Lounies, 1996). Social capital has potential value because it provides an opportunity for actors to access information and resources in their social network. Research on social capital has mainly concentrated on how and why firms can generate value from their social capital. It has shown that different settings where social capital provides information and learning benefits (Powell, Koput, and Smith-Doerr, 1996), increased legitimacy (Ragas and Bulut, 2003), power and control (Burt, 1992), and coordination benefits (Coleman, 1990; Utzi, 1993). Furthermore, research has begun to demonstrate that the value of social capital depends on a number of moderators and contingencies, among these, task characteristics (Hansen, 1999; Podolny, 1999); firm characteristics (Rowley, Bahram, and Krackhardt, 2000); market uncertainty (Kogut and Zander, 1992); prevalent norms (Karahanna and Zuckerman, 1998); and complementary capabilities (Hargadon and Sutton, 1996).

Yet research on the antecedents and consequences of social capital still faces a number of important challenges (see Adler and Kwon, 2002). In particular, to date we know very little about how organizations' social capital develops over time, about the factors that induce and constrain its development, and about possible related performance implications (Baum, Calabrese, and Silverman, 2009). Such a dynamic perspective is important because an organization faces different task and resource requirements and different stages of its organizational development (Krackhardt, 1988) and is often exposed to changing demands from an evolving internal and external task environment (Ebers, 1999). Whether or not an organization is able to accommodate these evolving demands by adjusting its social capital to

Methodology: Quantitative Studies

- Pros:
  - Generalizability
  - Theory testing

- Cons:
  - Do you measure what you hypothesize?
  - Do you rule out alternative explanations?
Methodology: Quantitative Studies

Methodology: Quantitative Studies

Multi-Level Analysis

Introduction
The recent expansion of the resource-based view into dynamic capabilities provides a fresh perspective for analyzing how firms develop new capabilities to cope with shifting markets. This theoretical perspective posits that a firm's ability to "integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" lies at the core of its ability to innovate (Teece et al. 1997, p. 556). Dynamic capabilities facilitate not only the ability of an organization to recognize a potential technological shift, but also its ability to adapt to change through innovation (Ell and Rothaermel 2010). Kotabe and Martin (2003, p. 1197) suggest that advancements in dynamic capabilities, which they describe as "processes to integrate, reconfigure, gain, and, release resources—as much and as often as market requires," can be found at the individual, firm, or network level (see also Zollo and Winter 2002).

Assuming that firms can show advancements across different levels to build dynamic capabilities, several important but understudied questions arise, such as: Where is the locus of the advancements to enable dynamic capabilities? Does the locus lie within the individual, within the firm, or within networks? If so, which levels are relatively more important? Or does the locus of the advancements to dynamic capabilities lie within the intersection of any of these levels? In other words, how do the locus lie across multiple levels of analysis?

If the locus of the advancements to dynamic capabilities lie across multiple levels of analysis, are the different mechanisms to innovate complement or substitute? Recent research generally focuses on only one level of analysis while neglecting other levels of analysis, thus opening the door for questionings due to under- or over-hypothesis. When studying the dynamics of technological innovation, for example, researchers generally analyze technological firms or a more or less homogeneous group of firms as an industry rather than neglecting to investigate their differential performance (Chesbrough 1997; Teece 1998; Henderson and Clark 1999; Teece, Pisano, and Shuen 1997; Winter and经济增长). Similarly, when analyzing intra-firm heterogeneous performance, researchers inter alia assume as much and as often as market requires," can be found at the individual, firm, or network level (see also Zollo and Winter 2002).
Methodology: Simulation

- **Pros:**
  - Enables researchers to implement realistic assumptions
  - Enables researchers to do complex things that cannot be done with paper and pencil
  - Enables researchers to ‘compress’ time and observe dynamics
  - Enables researchers to vary assumptions to see the change in outcomes

- **Cons:**
  - The same result can be obtain by different processes
EXPLORATION AND EXPLOITATION IN ORGANIZATIONAL LEARNING*

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This paper examines the relation between the exploration of new possibilities and the exploitation of old variations in organizational learning. It concerns core questions in allocating resources between the two, particularly those introduced by the distribution of resources and benefits across time and space, and the effects of technical innovation. Two general situations involving the development and use of knowledge in organizations are modeled. The first is the case of sequential learning between members of an organization and an external world. The second is the case of learning and competitive advantage in comparison to others. The paper develops an argument that adaptive processes, by fostering exploration more rapidly than exploitation, are likely to become effective in the short run and self-destructive in the long run. The possibility that certain common organizational practices amplify this tendency is discussed.

Organizational Learning: Risk Taking, Knowledge, and Competitive Advantage

A central concern of studies of adaptive processes is the relation between the exploration of new possibilities and the exploitation of old ones (Schumpeter 1934; Holland 1959; Kuran 1988). Exploration includes all activities that explore new ideas and tasks, whereas exploitation is the process of finding new solutions to previously identified problems. As a result, maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity.

This paper considers some aspects of such problems in the context of organizations. Both exploration and exploitation are essential for organizations, but they compete for scarce resources. As a result, organizations make explicit and implicit choices between the two. The explicit choices are found in the allocation of resources to alternative innovations and competitive strategies. The implicit choices are based on lessons learned in the process of innovation. The following sections discuss some of these choices and their implications for organizations.


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Methodology: Experimental Studies

**Pros:**
- Enables researchers to draw causal relationships
- Enables researchers to control ‘everything else’
- Enables investigations where field data are not available

**Cons:**
- Experiment does not replicate complexity in the real situations. Relevancy of experiment with real situations might be questionable
Methodology: Experimental Studies

It is a widespread perception that knowledge created by scholars is not used in practice. This perception exists in the social sciences and in business (Benton, 1981; psychology; Fowler, 1996; Hoobler & Pinchbeck, 1972; McKee, 1983; Pendleton, 1999; and education; Hallinan, 1976; Schwartz, Malcom, & Highower, 1980, as well as in the management discipline; Beyer, 1992; Choi, 1991; Haufler, 1994; Myers, Musa, & Grayson, 1992; Porter & McKee, 1998). Management researchers have proposed to reduce this perceived gap by seeking for their preferred approach to knowledge creation and transfer. Many of them call for creating management knowledge by identifying ambidextrous basic principles and demonstrating how they might be translated into specific contexts. Thompson (1967) advocated this approach over 40 years ago, and more recently Hage (1988) emphasized the development of theoretical knowledge as the primary objective of the discipline. Other management researchers have responded to the perceived gap between knowledge and practice by emphasizing applied knowledge. Thomas and Tynan (1982), for example, proposed that the producers of knowledge should enhance its relevance by obtaining information about specific problems and situations encountered by knowledge users. Likewise, Farkas (1982) advocated manufacturing early-stage observations and interviews with system participants to learn the unique ways in which they understand their work. Abrahamson (1992) called for research in strategic management adapt variables that relate to organizational goals, to test research results in specific organizational settings, to use rigorous qualitative methodologies to incorporate practical insights, and to document contextual conditions within which research becomes valid.

Pertaining to the results of 27 empirical studies about the use of social science research, Beyer and Titus (1982) described a complex process that depends on many contextual factors, such as how research process produces information, how the relationship between users and researchers is established, how strategic information is formulated and controlled, and how action is generated. Other management scholars have also recognized the importance of user contexts and processes. Hypothesizing that knowledge is influenced by such factors as task complexity and communication (Emerson, Meacham, & Wronski, 1982; and cognitive team processors (Buydeman & Grether, 1998).

In this article, we take a step back from these diverse claims about the specific issues, contexts, or
Which Methodology?

“Methodological fit, an implicitly valued attribute of high-quality .. research, has received little attention in the management literature. Fit refers to internal consistency among elements of a research project—research question, prior work, research design, (methodology), and theoretical contribution”

Conclusion

- Move towards theories that are
  - dynamic
  - combine internal resources/competencies with external factors
  - view competitive advantage as transient
Conclusion

- Methods must follow research question
  - What is the research question / phenomenon?
  - How do I best answer this question?
    - Theory
    - Method
Conclusion

- Strategic Management is a multi-disciplinary field, but informed by social science disciplines
  - Economics
  - Sociology
  - Psychology