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Matching Internal and External Ecological Dynamics: The Role of the Strategy-Making Process for Organizational Longevity



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Matching Internal and External Ecological Dynamics: The Role of the Strategy-Making Process for Organizational Longevity

OVERVIEW

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- II. Foundational Methodological Sources
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 - A process model of internal corporate venturing
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 - Intel’s transformation from memory to microprocessor company
 - Fundamental proposition about corporate transformation
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- V. Dynamic Forces Driving Firm Evolution
 - The role of the internal section environment
- VI. Three Tools of an Evolutionary Lens on Strategy-Making
- VII. A Framework of Strategic Dynamics
 - Matching strategy processes and strategic dynamics situations
- VIII. Cross-Boundary Disruptors

I. Foundational Theoretical Sources

1. 1968-69:
 - “Optimal Firm Size From the Perspective of Business Economics” (Undergraduate thesis, Antwerp University)
 - Edith Penrose, *The Theory of the Growth of the Firm* (1959)
 - Alfred Chandler, *Strategy and Structure* (1962)
2. 1970-73:
 - “Strategic Investment in Business from the Viewpoint of Organizational Decision-Making,” *Ekonomisch en Sociaal Tijdschrift*, December 1971 (review article with A. van Cauwenbergh)
 - Joseph Bower, *Managing the Resource Allocation Process*, 1970
3. 1978-1980:
 - “Managing Innovating Systems: A Study of the Process of Internal Corporate Venturing” (Doctoral dissertation, Columbia University)
 - Leonard Sayles, *Managerial Behavior*, 1964
 - Joseph Bower, *Managing the Resource Allocation Process*, 1970
4. Early 1980s:
 - Henry Mintzberg, “Patterns of Strategy Formation,” *Mgt. Sci.*, 1978
 - Karl Weick, *The Social Psychology of Organizing*, 1969
 - Howard Aldrich, *Organization and Environments*, 1979
 - Michael Hannan and John Freeman, “Structural Inertia and Organizational Change,” *ASR*, 1984

II. Foundational Methodological Sources

1. Principles of “Grounded Theorizing” (Glaser and Strauss, 1967):
 - comparative case analysis
 - substantive and formal theory
2. The “Process Model” Research Approach (Joseph Bower):
 - sequentiality and simultaneity of strategic action
3. “‘Degrees of Freedom’ and the Case Study” (Donald Campbell, 1975):
 - Using case study research to test theory
4. More Recently: Modern Historical Research Approach (John Lewis Gaddis, *The Landscape of History*, 2002):
 - Continuities (patterned) and contingencies (non-patterned)
 - “Particular generalization”
 - “Interdependent” variables
 - “Context” as the dependency of sufficient causes upon necessary ones
 - “Similarity across scale”

III. Discovering and Resolving an Anomaly

1. **Mid-1970s – Received Theory = Chandler’s (1962) fundamental proposition:**
 - “Structure follows strategy” in major U.S.-based corporations
2. **Mid-1970’s - Field Research Findings Concerning Internal Corporate Venturing:**
 - New Venture Division created *after* many new ventures had already sprung up in various operating divisions of a U.S. diversified major firm, and *before* a corporate diversification strategy had been formulated
3. **Implication – Need to amend Chandler’s fundamental proposition:**
 - “Strategy follows strategic behavior” in internal corporate venturing
4. **How to model this?**
 - Attempt to use Bower’s (1970) “process model of resource allocation”
5. **Problem:**
 - Complete set of managerial activities (Sayles, 1964) involved in ICV cannot be mapped onto the received process model
6. **Solution (after several months of intellectual struggle):**
 - Introduce “strategic context determination” as part of the process model, thereby generalizing it so as to be able to *map activities that change the corporate strategy*

III. Resolving An Anomaly: A Process Model of ICV*

| | | Venture-Level Strategy | | Corporate-Level Strategy | |
|-------------------|-----------------------------|----------------------------|--------------------|---|--------------------|
| | | Core Processes | | Overlaying Processes | |
| | | Definition | Impetus | Strategic Context | Structural Context |
| Management Levels | Corporate Management | Monitoring | Authorizing | Rationalizing | Structuring |
| | Senior & Middle Management | Coaching Stewardship | Strategic Building | Delineating | Negotiating |
| | Group Leader Venture Leader | Technical and Need Linking | Strategic Forcing | Gatekeeping Idea Generating Bootlegging | Questioning |

Annotations in diagram:
 - Orange arrow: Product Championing (from Strategic Building to Strategic Forcing)
 - Yellow arrow: Organizational Championing (from Strategic Building to Delineating)
 - Red arrow: Selecting (from Structuring to Delineating)

*Source: Burgelman, R.A. "A Process Model of Internal Corporate Venturing in the Diversified Major Firm," ASQ, June 1983

IV. An Evolutionary Framework of the Strategy-Making Process in Established Firms

1. **Revisiting Chandler:**

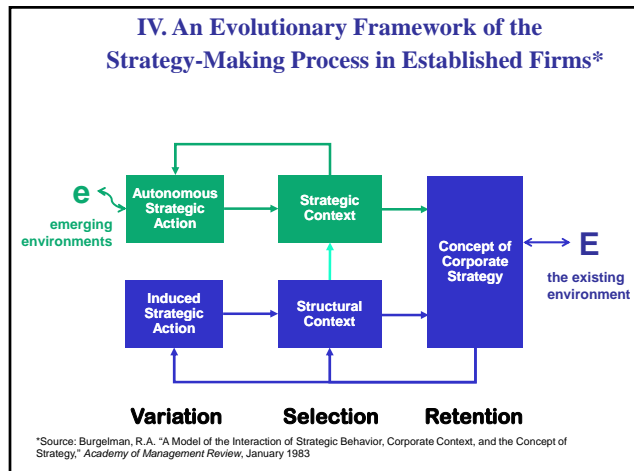
“At du Pont, General Motors, and Jersey Standard, the initial awareness of the structural inadequacies caused by the new complexity came from executives close to top management, but who were not themselves in a position to make organizational changes. *In all cases, the president gave no encouragement to the proposers of change.*” (1962, p. 308, emphasis provided).
2. **Revisiting Penrose:**

“In the last analysis, the ‘environment’ rejects or confirms the soundness of judgments about it, but the relevant environment is not an objective fact discoverable before the events. (1968, p. 41)
3. **Revisiting Bower (Bower and Doz, 1979):**

“Thus, in contrast to strategy formulation as the critical direction-setting general management activity, this new process school of research suggested an alternative, that is, the strategic process (p. 158)
4. **Revisiting Weick (1969) and learning about Aldrich (1979) :**
 - The role of variation, selection and retention in organizational evolution
5. **Hannan and Freeman (1977, 1984) pose a fundamental challenge to the role of strategy:**
 - Organizational ecology perspective: at the population level of analysis, organizational change is the result of replacement and selection; not adaptation
6. **Integrating strategy and ecology through the idea of the “internal ecology of strategy-making:”**

Analogously to the population-level change driven by founding and disbanding rates, companies can continue to adapt and survive to the extent that their internal ecology of strategy-making allows them to enter into new businesses and exit from failing ones over time.

IV. An Evolutionary Framework of the Strategy-Making Process in Established Firms*



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Reconsidering the "Punctuated Equilibrium" View of Organizational change:

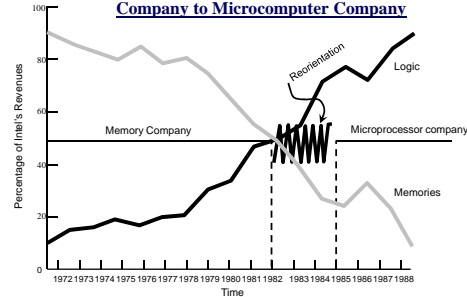
- Using a Single case Study to Test Theory - Campbell's View:*
- "In a case study done by an alert social scientist who has thorough local acquaintance, the theory he uses to explain the focal difference also generates predictions or expectations on dozens of other aspects of the culture, and he does not retain the theory unless most of these are also confirmed. In some sense, he has tested the theory with degrees of freedom coming from the multiple implications of any one theory."
- Example: The punctuated equilibrium and the internal ecology models of strategy making - Intel's strategic transformation

*Source: Donald T. Campbell, "Degrees of Freedom and the Case Study," *Comparative Political Studies*, Vol. 8, No. 2, July 1975, pp. 181-182.

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IV. An Evolutionary Framework of the Strategy-Making Process in Established Firms*

Intel's Transformation from Memory Company to Microcomputer Company



*Source: Burgelman, R.A., *Strategy is Destiny: How Strategy-Making Shapes a Company's Future*, Free Press, 2002

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IV. An Evolutionary Framework of the Strategy-Making Process in Established Firms

Fundamental Proposition of Corporate Transformation:*

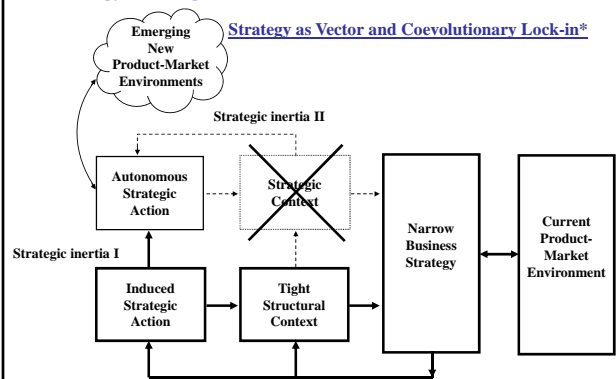
The population of firms with successful corporate transformations will contain a significantly higher proportion of firms whose transformation was preceded by internal experimentation and selection processes than the population of firms with failing transformations.

*Source: R.A. Burgelman, "Intraorganizational Ecology of Strategy Making and Organizational Adaptation: Theory and Field Research," *Organization Science*, Vol. 2, No. 3, August 1991, p. 256.

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IV. An Evolutionary Framework of the Strategy-Making Process in Established Firms

Strategy as Vector and Coevolutionary Lock-in*



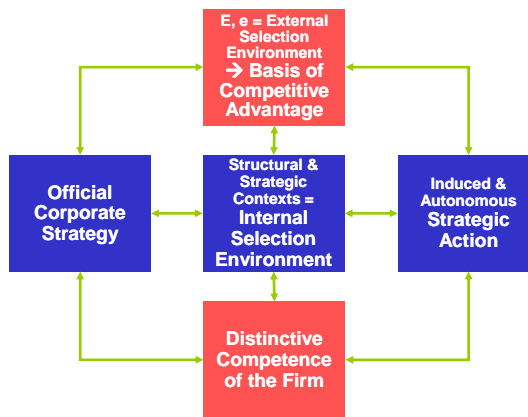
*Burgelman, R.A., "Strategy as Vector and The Inertia of Coevolutionary Lock-in," *Adm. Sci. Quart.*, 2002: 353

Table 1: Percentage of Developmental Resources Allocated to Induced and Autonomous Strategy Processes at Critical Times in Intel's Evolution*

| | 1976 ¹ | 1984 ² | 1989 ³ | 1991 ⁴ | 1998-2001 ⁵ | 2003 ⁶ | 2005 ⁶ |
|-----------------|-------------------|-------------------|-------------------|-------------------|------------------------|-------------------|-------------------|
| Induced (I): | 75 | 65 | 66 | 87 | 65 | 70 | 50 |
| Autonomous (A): | 25 | 35 | 34 | 13 | 35 | 30 | 50 |

* As estimated by A.S. Grove, based on personal experience and company documents
¹ I = memory related; A = microprocessor related
² I = memory related; A = microprocessor related
³ I = x86 microprocessor related; A = non-x86 (RISC) microprocessor related
⁴ I = x86 microprocessor related; A = non-x86 (RISC) microprocessor related
⁵ I = x86 microprocessor business related; A = related to networking and communications businesses
⁶ I = pure microprocessor business related; A = platform-business related (including Centriano)

V. Dynamic Forces in Firm Evolution*

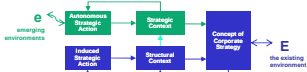


*Source: Burgelman, R.A., "Fading Memories: A Process Theory of Strategic Business Exit in Dynamic Environments," Adm. Sci. Quart., March 1994

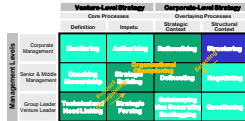
Tool I: Dynamic Forces Driving Firm Evolution



Tool II: An Evolutionary Framework of the Strategy-Making Process in Established Firms



Tool III: A Process Model of Internal Corporate Venturing



VI. Three Tools of An Evolutionary Lens on Strategy-Making*

*Source: R. A. Burgelman, *Strategy is Destiny: How Strategy Making Shapes a Company's Future*, Free Press, 2002

VII. A Framework of Strategic Dynamics*

| | P_i 's Strategic Actions | |
|----------------------------|------------------------------------|-----------------------------------|
| | Rule-abiding | Rule-changing ¹ |
| Rule-abiding (E, e) | Limited industry change | P_i -controlled industry change |
| Rule-changing ¹ | P_i -independent industry change | Runaway industry change |

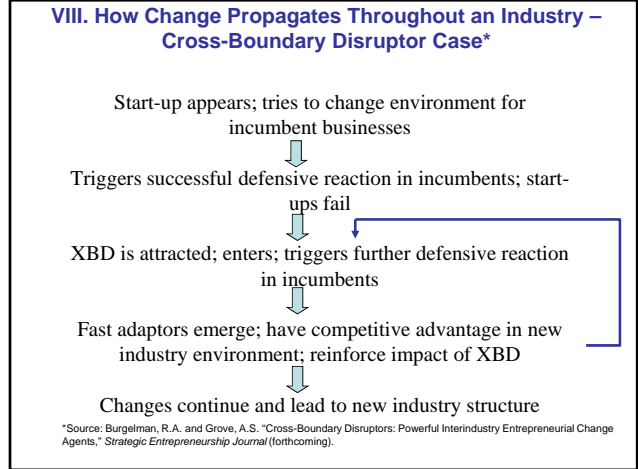
¹ Rule-changing actions have the potential to change the competitive context for all the players (they materially change the competitive value of existing product-market positions and/or distinctive competencies of the players).

*Source: Burgelman, R.A. and Grove, A.S., "Let Chaos reign, Then Rein In Chaos - Repeatedly: Managing Strategic Dynamics for Corporate Longevity," *Strategic Management Journal* 28, October 2007

VII. Matching Induced and Autonomous Processes to Strategic Dynamics Situations

| | STRATEGIC DYNAMICS SITUATIONS | | | |
|---|--|--|---|--|
| | Limited industry change Linear and Stable (Base Case) | P-independent industry change Nonlinear and Disruptive | P-controlled industry change Nonlinear and Complex | Runaway industry change Nonlinear and Chaotic |
| Induced Strategy Process | Serves to exploit core business opportunities | Serves to retreat orderly from core business | KEY: Serves to exploit new major opportunities through "vectoring" the organization in the new strategic direction | KEY: Serves to align the organization behind a "safe bet," ¹ or "bet the company" ² strategic direction OR Serves to maintain alignment during "wait to bet" ³ decision |
| Autonomous Strategy Process | Serves to explore potential new growth opportunities | KEY: Serves to develop new opportunities consistent with distinctive competence in advance of threats to current ones | Serves to continue to explore potential new future growth opportunities | KEY: Serves to reduce uncertainty of new possible strategic directions before betting on one OR Serves to continue to experiment with new opportunities While waiting to bet |
| IMPLICATIONS FOR RESOURCE ALLOCATION | Watch evolution of growth opportunities to marginally re-balance support of both processes | Gradually increase resource allocation to winning new opportunities in autonomous process | Massive increase in support of induced strategy process but maintain viability of autonomous process | Massive increase in support of induced strategy process but maintain viability of autonomous process OR Gradually increase resource allocation to winning new opportunities in autonomous process |

¹ Safe bet = validated opportunity and cash reserves; ² Bet the company = validated opportunity and no cash reserves; ³ Wait to bet = not-yet-validated opportunity and cash reserves.



Thank you!