

## **Part II**

### **When the Bottom-up Process Fails**



# 5

## When the Bottom-up Resource Allocation Process Fails

*Donald N. Sull*

A core tenet of strategy process research is that strategy results from a series of actions and decisions taken over time rather than a single ‘big bet’ at a given point in time (Bower 1970; Mintzberg 1978; Burgelman 1983*c*; Mintzberg and McHugh 1985; Mintzberg and Waters 1985). In a large, complex organization, these decisions generally emerge from lower levels in the organization (Bower 1970; Mintzberg 1978; Burgelman 1983*c*; Pascale 1984; Mintzberg and Waters 1985; Noda and Bower 1996).

Although these studies have been characterized as largely descriptive (Lovas and Ghoshal 2000: 892), there are sound theoretical reasons to conceive a distributed, bottom-up process to be a mechanism capable of overcoming the challenges posed by bounded rationality and dispersed knowledge (Simon 1945). Simon argues that bounded rationality prevents any single individual from collecting and processing all the relevant knowledge necessary to make an optimal decision. Bottom-up resource allocation relieves top executives of the need to collect and process all information by distributing decision rights to organization members who possess the relevant specific knowledge (Cyert and March 1963). In many complex, multiunit organizations, for example, frontline employees and middle managers will have a more detailed understanding of current customers’ needs, potential market opportunities, and competitive dynamics, and therefore be better positioned to make appropriate decisions. Agents lower in the organization also have incentives to define and support successful projects, to the extent their rewards, such as promotion or job security, are a function of their reputation for identifying and lending impetus to successful projects (Bower 1970). Thus, a bottom-up process can help organizations

overcome the strategic challenges posed by bounded rationality of top executives and dispersed knowledge.

Despite their advantages, bottom-up resource allocation processes can fail under certain circumstances. The three chapters in this section illustrate three specific sources of failure and contribute to a growing body of research on the circumstances under which a bottom-up resource allocation process is liable to result in suboptimal outcomes. Christensen's influential research focused on 'disruptive technologies' that did not pose significant technological challenges for incumbents but failed to address the needs of their current customers. In a careful study of the disk-drive industry, Christensen found that incumbent producers consistently failed to commercialize disruptive technologies. As described in Ch. 4, Christensen integrates resource dependence and the resource allocation process perspectives to explain an anomaly in the innovation literature regarding incumbent firm failure. Investments in disruptive technology did not serve the needs of existing powerful customers whose business provided critical resources to the disk-drive producers. Because they lacked support from resource providers, these proposals failed to attract the management support required to obtain funding. As a consequence, they did not survive the rigors of the firms' internal resource allocation processes (RAP). The bottom-up process in resource allocation failed because line managers could not find support for the disruptive technology with their existing customers. As predicted by the RAP model, this meant that most proposals with disruptive characteristics were not defined by operating levels of management. The few proposals that did progress to middle management received no impetus. Lack of demand from existing customers was the kiss of death. Even when corporate-level management might have been supportive of a disruptive investment, the bottom-up process failed to produce plans to which resources might have been allocated.

Whereas most RAP research explores failures in *investment*, Sull, in Ch. 7, explores why a bottom-up resource allocation process fails when faced with the need for *disinvestment*. In a clinical study of Firestone's response to radial tire technology, Sull found that frontline employees and middle managers closest to the traditional business rendered obsolete by radial tires had little incentive to propose plant closure, because it would jeopardize their own job security and that of their colleagues and subordinates. This failure results from an asymmetry in payoffs between investment and disinvestment proposals. Sound investment proposals create value for the organization and also enhance the employee's intraorganizational reputation and job security (Bower

*When Bottom-up Resource Allocation Fails* 95

1970). Proposals for disinvestment, in contrast, may be optimal for the organization but run counter to the employees' interests (Jensen 1993). Frontline employees and middle managers also may fail to make disinvestment proposals to avoid the perception that their early actions were mistaken, leading them to escalate their commitment (Brockner 1992; Ross and Staw 1993). Although this study focuses on disinvestment in the context of capital budgeting decisions in a manufacturing company, the model predicts a similar process failure in other contexts where employee incentives and reputation are endangered by pulling resources from ongoing projects—e.g. research and development initiatives, internal corporate venturing. In most cases, disinvestment cannot, of course, be delayed forever, and the model predicts a delay in exit beyond the optimal point rather than a complete absence of disinvestment.

Whereas Christensen and Sull present specific circumstances where bottom-up resource allocation breaks down (due to powerful customers in the first and misaligned incentives for divestment in the second), Kuemmerle, in Ch. 8, presents a more general cause of bottom-up process failure. In comparing the international R&D investment decisions of established companies in the electronics and pharmaceutical industries with a matched pair sample of start-up firms, Kuemmerle finds important differences in the structure of their resource allocation decisions. Even though both types of firm can have effective bottom-up processes blocked by autocratic imposition of top management, the layer of middle management of more established companies—not present in start-ups—were an added source of failure. They blocked bottom-up proposals from gaining impetus, not from a lack of fit with structural or strategic context, but because of political and personal conflicts with operating managers below. Kuemmerle suggests that established companies are likely to be disadvantaged in international expansion relative to entrepreneurial firms when political conflict is high between middle and operating management, and that this probability is higher in more established, multilayered organizations. Thus, whereas middle management can play a translating role in assimilating complex, distributed knowledge, it also can prevent that knowledge from rising to the senior levels of an organization—in other words, both outcomes are possible. This challenge appears to be a general phenomenon, not a specific case. Thus, whether you are considering disruptive proposals to new customers, disinvestment decisions, or other significant resource allocation decisions, the possibility of middle management playing a blocking role is a risk in resource allocation.

Later chapters in this book will identify other situations in which the internal resource allocation process fails. In a study of media firms, Eisenmann (2002) found that the bottom-up resource allocation process failed to produce required investment proposals because the magnitude of the investments required exceeded the budget authority of divisional managers. They were also reluctant to bear the risk associated with the high variance in potential payoffs of these bets. These findings are consistent with earlier research that found managers avoided risky R&D investments to improve the probability that they would achieve budget targets (Hoskisson and Hitt 1988; Hoskisson, Hitt, and Hill 1991). Eisenmann's research also suggests that investment proposals that require integration across units in a multidivisional corporation are likely to fall through the cracks because division heads lack the breadth of perspective to identify and incentives to pursue these opportunities (Eisenmann and Bower 2000). Gilbert's research on newspaper companies' response to the Internet demonstrates that an organization's framing of a contextual change as either an opportunity or a threat influences the effectiveness of the firm's bottom-up resource allocation process in responding to the change.

You will also notice several trends in these chapters that signal patterns in subsequent research. First, the work since Bower's original 1970 research has become increasingly explanatory, even predictive, as opposed to descriptive. Christensen and Bower are not simply trying to describe how resource providers capture the resource allocation process, they are trying to explain the failure of incumbent firms in the face of technological change. Sull is not merely trying to describe the divestment process, he is trying to explain why key expenditures do not occur. This explanatory approach surfaces in much of the work that follows and can be seen in the chapters by Noda and Bower, Gilbert, and Eisenmann and Bower later in the book.

The second trend the reader will notice is that the chapters presented in this section represent a common research approach used by many of the RAP scholars that followed Bower. In Ch. 4, Gilbert and Christensen describe this as a pattern of anomaly-seeking research. The authors of the chapters in this section all use breakdowns in the resource allocation process as a way of shedding light on the workings of the process itself. In this sense, the focus on 'failure' is really the search for anomaly, where the researcher recognizes, 'I would have expected x, but I'm observing y.' Gilbert and Christensen described this process of anomaly seeking as creating opportunities to improve theory. In this section, we now see the continuation of this process of observed anomaly leading to revisions in the original

*When Bottom-up Resource Allocation Fails* 97

model. Christensen and Bower use this to capture how customers shape the resource allocation process, and Sull reports similar findings with capital markets. Note also that Sull tries to use these new observations to reconsider the model itself. Although he leaves the core components of RAP unchanged, he tries to capture the various forces that shape the process of definition and impetus. And whereas the model will continue to evolve through repeated efforts of anomaly-driven research, in Sull we see the first effort to move toward a revised model.

## References

- Bower, J. L. (1970). *Managing the Resource Allocation Process*. Boston, Mass.: Harvard Business School Press.
- Brockner, I. (1992). 'The Escalation of Commitment to a Failing Course of Action: Toward Theoretical Progress'. *Academy of Management Review* 17/1: 39–61.
- Burgelman, R. A. (1983c). 'A Process Model of Internal Corporate Venturing in the Diversified Major Firm'. *Administrative Science Quarterly* 28: 223–44.
- Cyert, R. M., and March, J. G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Eisenmann, T. R. (2002). 'The Effects of CEO Equity Ownership and Diversification of Risk Taking'. *Strategic Management Journal* 23: 513–34.
- Eisenmann, T. R., and Bower, J. L. (2000). 'The Entrepreneurial M-Form: Strategic Integration in Global Media Firms'. *Organizational Science* 11: 348–55.
- Hoskisson, R., and Hitt, M. (1988). 'Strategic Control Systems and Relative R&D Investments in Large Multiproduct Firms'. *Strategic Management Journal* 9: 605–21.
- and Hill, C. (1991). 'Managerial Risk Taking in Diversified Firms: An Evolutionary Perspective'. *Organization Science* 2: 296–314.
- Jensen, M. C. (July 1993). 'The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems'. *The Journal of Finance*.
- Lovas, B., and Ghoshal, S. (2000). 'Strategy as Guided Evolution'. *Strategic Management Journal* 21: 875–96.
- Mintzberg, H. (1978). 'Patterns in Strategy Formation'. *Management Science* 24: 934–48.
- and McHugh, A. (1985). 'Strategy Formulation in an Adhocracy'. *Administrative Science Quarterly* 30: 160–97.
- and Waters, J. A. (1985). 'Of Strategies, Deliberate and Emergent'. *Strategic Management Journal* 6/3: 257–72.
- Noda, T., and Bower, J. L. (1996). 'Strategy Making as Iterated Processes of Resource Allocation'. *Strategic Management Journal*, Summer Special Issue 17: 159–92.

98 *When the Bottom-up Process Fails*

- Pascale, R. T. (Spring 1984). 'Perspectives on Strategy: The Real Story Behind Honda's Success'. *California Management Review*, 47-72.
- Ross, J., and Staw, B. M. (1993). 'Organizational Escalation and Exit: Lessons from the Shoreham Nuclear Power Plant'. *Academy of Management Journal* 36: 701-32.
- Simon, H. A. (1945). *Administrative Behavior*. New York: Macmillan.