Effectual and Causal Principles in Corporate Strategy Formation: Understanding Prediction and Control

Principal Topic

Entrepreneurial and corporate success is driven by strategies that create unique competitive advantages. The process of strategy formation will have a deep impact on strategy content, actions and performance (Mintzberg, 1994; Gavetti *et al.,* 2005). But increasing uncertainty regarding a firm's suppliers, resources, buyers and the overall environment raises new challenges for the optimal approach to strategy formation (Chmielewski and Paladino, 2007; Tallon, 2008).

Studies on strategy formation have been developed around the dimension of prediction (Rudd *et al.*, 2008). The *planning school* intends to implement 'anticipative flexibility': firms precisely predict the future, anticipate risks and opportunities and position the firm accordingly (Ansoff, 1979; Porter, 1980). The *adaptive school* instead fosters 'adaptive flexibility': firms focus on presently known facts, develop dynamic capabilities and react fast to capture emerging opportunities (Mintzberg, 1994; Teece e*t al.*, 1997).

But *planning* and *adaptive* approaches still imply the environment to be exogenously given and competitive grounds to be stable. When breaking with these assumptions, "*firms might employ comparatively superior strategies to exploit its industry environment, even if it is highly dynamic or disrupted*" (Selsky *et al.*, 2007). By introducing the dimension of pro-actively controlling the environment, Wiltbank *et al.* (2006) opened up a new landscape for strategy formation. However, in order to examine and implement the orthogonal dimensions of prediction and control, a deeper understanding of their respective antecedents is needed.

Sarasvathy (2001) developed the concept of *effectuation* and *causation* by studying entrepreneurs making strategic decisions in highly uncertain environments. Successful entrepreneurs do not stress flexibility towards an exogenously given environment, but instead aim to influence an endogenous environment. Sarasvathy (2001) and Brettel *et al.* (2011) developed detailed principles for effectuation – *means preference*, *uncertainty leveraging*, *partnerships* and *affordable loss preference* – and its counterpart causation – *goals preference, uncertainty avoidance, competitive analysis* and *return preference*.

Indeed, positive performance effects of *effectual principles* under uncertainty have been found for new venture creation (Read *et al.*, 2009), venture investing (Wiltbank *et al.*, 2009) and corporate R&D projects (Brettel *et al.*, 2011). We extend the application and analysis of effectual and causal principles into corporate strategy formation to examine their application in the strategy formation processes of established corporations. We develop a clear understanding of the orthogonal concepts of prediction and control and their respective antecedents. By closing these gaps from entrepreneurship research to strategy formation and within the strategy literature, we are able to further develop this promising concept for decision makers under uncertainty.

Method

We employ a multi-method approach, consisting of initial interviews with strategists and strategy experts and a pre-tested questionnaire sent out in 2012. In order to gain valid insights on corporate strategy formation, we surveyed Chief Executive Officers (CEOs) and Chief Strategy Officers (CSOs). Leveraging the unique established relationships of a major global strategy consulting firm, The Boston Consulting Group, we were able to conduct 124 surveys among companies in the Forbes Global 2,000 index, covering 10 industry sectors and 28 countries. Our analysis is based on hierarchical OLS regression models and comprises established scales for the eight independent principles of effectuation and causation (Brettel *et al.*, 2011) and the main dimensions of strategic emphasis on prediction and control (Wiltbank *et al.*, 2009).

Results & Implications

We are able to identify a firm's approach towards uncertainty as the key differentiator between processes emphasizing prediction or control. Our significant, bi-nominal findings identify two distinct strategy formation processes. On the one hand, strategy formation is built around minimizing uncertainty and avoiding its possible impact. On the other hand, we find processes embracing uncertainty and leveraging disruptive change. We thus develop a clear understanding of causal principles within strategy formation of established corporations. In more detail, we find that *goals preference*, *return preference* and *uncertainty avoidance* significantly explain processes that emphasize prediction. Contrarily, principles of effectuation are less clearly implemented in strategy formation of established corporations. While processes with high emphasis on control try to leverage uncertainty and change of the environment, *means preference*, *partnerships* and *affordable loss preference* are not systematically applied in large corporations. We explain this finding by the under-development of this dimension in strategy formation. While to systematic control-approach towards the environment has been developed, individual firms single out and embed principles of effectuation in a variety of more classical approaches.

Our research extends the debate about *effectuation* and its application in established corporations, as suggested by Sarasvathy (2001) and Wiltbank *et al.* (2006). By identifying *effectuation* and *causation* based principles as antecedents of strategy formation, we create the fundament for further research into the systematic examination of prediction and control and its performance effects under uncertainty. Managers will be able to get a better understanding of alternative strategy formation processes and how to implement fundamental characteristics and abilities. "*Understanding the differential use of these strategic approaches may be relevant […] to managers making decisions in very uncertain situation*" (Wiltbank *et al.*, 2009).