Causal ambiguity

Business owners and researchers have been searching for the elusive secret recipe that if followed will enable firms to succeed in perpetuity. One long running thread of research has been the relationship between firm strategy and firm performance. Dozens of mediating and moderating factors have been theorized and tested over the years. One well established and researched relationship is between a firm's resources, knowledge, and capabilities, and the advantages these might give a firm over competitors. The advantage gained over competitors is known as competitive advantage or sustainable competitive advantage.

The resources, knowledge, and capabilities of a firm are collectively referred to as competencies (King, 2007). The relationship between competencies and competitive advantage is the key relationship in the resource-based view (RBV) (Barney, 1991; King & Zeithaml, 2001). One of the key components of the RBV is ambiguity about the relationship between firm resources and competitive advantage; this is known as causal ambiguity. Causal ambiguity is also related to organizational learning, (Levitt & March, 1988) and dynamic capabilities (Zollo & Winter, 2002). Studies have focused on and successfully linked causal ambiguity to differences in profitability, and knowledge transfer (King, 2007).

Even though causal ambiguity has been studied for at least two decades beginning with (Reed & DeFillippi, 1990), there is still quite a bit we do not know about causal ambiguity and its effects on sustainable competitive advantage. I analyze two theories which seem to offer competing explanations for the effects of causal ambiguity on sustainable competitive advantage – the RBV and institutional theory. According to the RBV, firms benefit when they are different from their competitors because they face less competition (Barney, 1991). Thus, better firm performance is the result of the firm’s ability to protect its’ differences. According to institutional theory, firms benefit from not being different because legitimacy gives firms access to resources (DiMaggio & Powell, 1983). The result of better access to resources is increased firm performance.

Both theories have implications for strategic decision makers. The keystone of RBV is inimitability (Barney, 1991). One of the ways resources are protected from imitation is through causal ambiguity (Barney, 1991). Causal ambiguity keeps competitors from understanding the relationship between resources and competitive advantage. In contrast, new institutional theories suggest that firms try to avoid challenges to legitimacy that might hinder resource acquisition by becoming like other firms in the same organizational field (DiMaggio et al., 1983). I try to take a step toward reconciling the different predictions of the RBV and institutionalism. Specifically I argue that the relationship between causal ambiguity and sustained competitive advantage is moderated by mimetic, coercive, and normative isomorphic pressures. Isomorphism is the process that forces one unit in a population to resemble other units that face the same set of environmental conditions (DiMaggio et al., 1983). As implied above there are three mechanisms through which isomorphic change occurs. Coercive isomorphism comes from the political influences on a firm (DiMaggio et al., 1983). Mimetic isomorphism results from copying the usual things done by other similar firms (DiMaggio et al., 1983). And normative isomorphism comes from professionalization (DiMaggio et al., 1983).

BUILDING THE PROPOSITION

This paper addresses relations among causal ambiguity, legitimacy, and competitive advantage. The level of theorizing is the individual firm. Prior research has developed several theoretical perspectives to explain the relationship between causal ambiguity and competitive advantage. I drew on the RBV and institutional theories because they seemed to offer competing predictions for firm level outcomes of ambiguity. The paper will develop as follows. The first section deals with definitions and assumptions. The second section explains the RBV literature and how causal ambiguity is related to sustained competitive advantage. The third section explains the institutionalism literature and how legitimacy is related to competitive advantage. The fourth section integrates the two theories, and explains the effects that mimetic, coercive and normative isomorphism will have on the relationship between causal ambiguity and competitive advantage.

Definitions, assumptions, and context

One of the important steps in the combination of two existing theories is defining the concepts that are shared by the original theories (Deephouse, 1999). Another important step is defining the boundaries that enclose this specific context. This paper focuses on causal ambiguity and institutional isomorphism. Causal ambiguity is conceptualized as ambiguity as to what factors are responsible for superior performance (Reed et al., 1990).

Several studies have linked causal ambiguity with a performance construct, such as profitability, competitive advantage, and knowledge transfer (Barney, 1991; Lippman & Rumelt, 1982; Simonin, 1999). The strategic management literature discusses how ambiguity affects competitive advantage (Barney, 1991). (Deephouse, 1999) says that organizational ecology discusses how similar firms have higher competitive intensity that affects survival rates. Institutional theory shows how isomorphism affects a firm's social and economic legitimacy (DiMaggio et al., 1983). This paper defines causal ambiguity as the extent to which a firm's competitive advantage is derived from factors that are ambiguous to other firms competing in the same market at the same time (Barney, 1991). This paper defines competitive advantage as a value creating strategy not simultaneously being implemented by any current or potential competitors (Barney, 1991).

Firms do not exist in a vacuum; they are part of a network of competitors, vendors, customers, governments, professional and trade organizations, and many others. Institutional theory describes this network as an organizational field (DiMaggio et al., 1983). In an organizational field, institutional models develop and diffuse through network ties (Deephouse, 1999). Firms in an organizational field get pressured from many different directions such as, all levels of government, trade or professional organizations, and the social networks of which the firm is a part (DiMaggio et al., 1983).

The assumption that causal ambiguity is related to sustainable competitive advantage is fundamental to the RBV (Barney, 1991). It requires a little more explanation to link institutional isomorphism with competitive advantage. Several researchers have extended institutional theory from a focus on governmental and educational structures and practices (Meyer & Rowan, 1977) to applying in the area of business strategy (Deephouse, 1996; Haunschild, 1993). Research has been done suggesting that mangers in similar industries come to a consensus about what strategies will be accepted as proper and reasonable over time (Suchman, 1995). This research shows, essentially, that mangers have an understanding within their section of the universe of what is recognized as a legitimate strategy. This consensus develops from interactions with the task environment, a subset of the organizational field used by institutional theorists (Deephouse, 1999). Therefore, this paper makes the assumption that business strategy and structure can gain legitimacy through institutional forces at the organizational field level and in the general environment.

In focusing on the relationship between causal ambiguity and sustained competitive advantage through the mechanisms of institutional isomorphism, several additional assumptions are necessary. First, I assume that all business managers try to be rational in their decision making by choosing and instituting business strategies that they think will increase competitive advantage (Deephouse, 1999). In making this assumption I am not ignoring institutional pressures. Institutional forces such as regulation, professional societies, or imitation of competitors can convince rational managers that certain strategies will increase competitive advantage (DiMaggio et al., 1983). The second assumption is that other intermediate variables that may moderate the relationship between causal ambiguity and sustained competitive advantage are not changing. This makes it possible to focus only on the role of isomorphism.

To recap, causal ambiguity is a firm-level construct representing the ambiguity experienced by competitors about which factors are contributing to the competitive advantage of the focal firm. The relationship between causal ambiguity and competitive advantage is subject to competitive and institutional forces. The next two sections propose that a firm should strive for ambiguity and a firm should be legitimate, respectively. The paper next integrates these two propositions.

Causal Ambiguity

Causal ambiguity will benefit a firm if ambiguity exists within all firms, including the focal firm (Barney, 1991). (Reed et al., 1990) state that causal ambiguity within the focal firm is not likely. But, (King et al., 2001) suggest that it is very easy to believe that ambiguity could exist within the focal firm given the complexity and messiness of managing strategic resources. As can be seen from the papers mentioned above, there are various understandings of causal ambiguity. One of the important issues to address in making sense of a construct with so many differing understandings is to define the construct well. As we are told by (King, 2007), despite significant attention and progress, there remains considerable ambiguity about causal ambiguity. In this paper I adopt the definition used by (Reed et al., 1990) that ambiguity is not understanding which factors are responsible for superior performance, this applies to those inside and outside the firm. This definition also leads us to understand the role of causal ambiguity in protecting a firm’s competency from imitation (Lippman et al., 1982).

Causal ambiguity experienced by competitors will protect the focal firm because competitors will not know how to imitate the competencies that are creating the most value for the firm. This is because the competing firms will not understand the relationship between the valuable resources and competitive advantage. (Barney, 1991) makes the argument that ambiguity is just as important within the focal firm in order to keep important knowledge from being disseminated to competitors. Competitors could also acquire specific firm knowledge by hiring mangers away from the focal firm.

Causal ambiguity has been shown to have both positive and negative influences on competitive advantage (King et al., 2001). A lack of opacity and confusion about the link between a firm's competency and its competitive advantage protects the competency from being easily imitated (King et al., 2001). The flip side of the causal ambiguity coin reveals that ambiguity is not all positive. Ambiguity experienced by managers within the firm may prevent important competencies from being imitated within the company (Reed et al., 1990). In other words, ambiguity can also limit the usefulness of a firm's competencies. Ambiguity can hamper the transfer and use of factors within the firm, which leads to a negative effect on competitive advantage (King et al., 2001).

The research on causal ambiguity was first divided into two areas by (King et al., 2001). Previously there was confusion and disagreement as to whether or not causal ambiguity existed only outside the firm or only inside or some combination of both. (King et al., 2001) came up with what they called linkage ambiguity and characteristic ambiguity. They defined linkage ambiguity as ambiguity surrounding the relationship between the firm's competencies and competitive advantage (King et al., 2001). The second type of ambiguity, characteristic ambiguity, was defined as ambiguity that is inherent to the resource itself (King et al., 2001). This type of ambiguity describes the different aspects of a competency that might cause it to be unclear and vague.

Institutionalism

The institutional perspective argues that inter-organizational relationships are shaped as much by a firm's need for legitimacy as by the need for providing products and services (Meyer et al., 1977). The need for legitimacy means that the organization will adopt structures and activities that are perceived as valid, proper, and up to date by external stakeholders (Meyer et al., 1977). In this way established organizations copy techniques from one another and begin to look and act similar. The emergence of common structures and approaches in the same field is called institutional isomorphism (Dimaggio & Powel).

The institutional perspective provides a framework for understanding the environment surrounding a firm's HR managers. Companies perform well when they are perceived by the larger environment to have a legitimate right to exist (Suchman, 1995). Thus, institutionalism describes how organizations survive and succeed through congruence between the organization and the environmental expectations. The institutional environment is composed of norms and values from stakeholder such as customers, investors, associations, boards, and governments. Thus, the institutional view says that organizations adopt structures and processes to please outsiders, and these activities come to take on rule-like status in organizations (Meyer et al., 1977). The institutional environment reflects what the greater society views as correct ways of organizing and behaving.

Isomorphism

Once an industry becomes established, there is an invisible push toward similarity called Isomorphism. The pressure to do things in a proper and correct way leads firms to develop formal structures (Meyer et al., 1977). Many organizational structures reflect the expectations and values of the environments rather than the demand of work activities. Organizations follow norms of structure that are perceived as important by the larger society in order to increase firm legitimacy and survival prospects, even though some structural elements may decrease efficiency (Meyer et al., 1977). The formal structure and design of an organization may not be rational, but increased legitimacy will ensure survival in the larger environment.

Organizations have a strong need to appear legitimate. In so doing many aspects of structure and behavior may be targeted toward environmental acceptance rather than toward internal technical efficiency. Many strategic decisions are characterized by forces that cause organizations to mimic other firms (DiMaggio et al., 1983).

Most firms face great uncertainty. It is not clear to senior executives exactly which strategies will achieve desired goals. In the face of this uncertainty, the pressure to copy other organizations occurs (Beckert, 1999). The one certain benefit is that management's feelings of uncertainty will be reduced and the company's image will be enhanced because the firm is seen as using the latest management techniques (Beckert, 1999).

The mimetic process works because organizations face continuous high uncertainty, they are aware of innovations occurring in the environment, and the innovations are culturally supported, thereby giving legitimacy to adopters.

Legitimacy

Legitimacy is defined as the general perspective that an organization's actions are desirable, proper, and appropriate within the environment's system of norms, values, and beliefs (Meyer et al., 1977). Institutional theory explains and deals with the intangible norms and values that shape behavior. Organizations must fit within the cognitive and emotional expectations of their audience. Most organizations actively shape and manage their reputations to increase their competitive advantage, and managers are always searching for new ways to bolster legitimacy (Beckert, 1999).

Moderating effects of isomorphism

(Reger & Huff, 1993) proposed that there are core firms that follow strategic recipes closely and secondary firms that follow recipes less closely. Because members of the organizational field are not always able to perceive differences or choose to ignore seemingly insignificant differences, firms can differ slightly from other members of the organizational field and still be seen as legitimate. Firms that choose actions that appear to be outside of the range of acceptability are taking a chance that they might lose legitimacy and with that access to important resources. Legitimacy of a firm is challenged when the firm's strategies are not adhering to the understood norms of behavior. Legitimacy challenges diminish the ability of a firm to acquire resources from potential exchange partners in the organizational field, such as customers, suppliers, and regulators (DiMaggio et al., 1983). A legitimate firm obtains resources of higher quality and at more favorable terms than does a firm whose legitimacy is challenged. With that in mind I make the following propositions regarding the effect of institutional isomorphism on the relationship between causal ambiguity and sustained competitive advantage.

Mimetic Isomorphism

Mimetic isomorphic pressures affect all firms. As stated above, the pressure to imitate comes from the need to manage uncertainty. Managers in all firms are attempting to find the easiest way to be successful, and if it appears that they can catch up or gain an edge by mimicking another firm, they will. Mimetic forces press managers both inside and outside the focal firm to understand the link between competencies and competitive advantage. Because of these pressures, managers attempt to reduce the ambiguity surrounding the link between competencies and competitive advantage. As stated above, there is an acceptable range of firm behavior that will go mostly unnoticed. A manager’s goal then is to have a causally ambiguous competency that is only a little different than the other firms within their organizational field. This will keep would be imitators from perceiving any difference, and will still allow the firm to have access to resources by not appearing illegitimate.

P1: Mimetic isomorphism will increase the positive relationship between causal ambiguity and competitive advantage in a firm with small but important differences from its competitors.

Firms with strategies that differ significantly from the norms in their field will suffer from increased resource costs and other negative consequences of illegitimacy. Their strategy will also fail to lead to a sustainable advantage since what they are doing different will be very apparent to competitors.

Competitors will be pressured to integrate the strategy into their own repertoire and will have incentive to understand the causally ambiguous relationship.

P2: Mimetic isomorphism will increase the negative relationship between causal ambiguity and competitive advantage in a firm with strategic differences that are significantly different from institutional norms.

Isomorphic pressures that are coercive come mostly from the governmental entities that firms must interact with. These pressures come in to play most often when there is some kind of regulatory change that is made. In these cases, there is pressure to comply with the new regulation or face some kind of punitive penalty. In certain cases regulatory changes may create a new niche for a firm to exploit some competency they have all ready developed.

P3: Coercive isomorphism will increase the positive relationship between causal ambiguity and competitive advantage for firms with competencies that are complimentary to the regulatory environment.

As regulations change firms have three choices, they can comply, ignore, or fight against the new mandates. In choosing which course of action they might take, a firm must consider the actions of other firms in their organizational field. A firm must follow the actions of the other firms or risk being labeled as illegitimate. In cases where the new regulation takes away a strategically important competency, a firm has to weigh the cost of losing the competency with the cost of legitimacy.

P4: Coercive isomorphism will increase the negative relationship between causal ambiguity and competitive advantage for firms with competencies that are not complimentary to the regulatory environment.

Normative isomorphic pressures come from professional and trade organizations. These organizations vary in their ability to make a real difference in the environment. Those organizations that do have an effect can make huge differences in which firms succeed and which ones fail. This type of isomorphism would seem to be the most related to legitimacy. These types of organizations make decisions about which types of firm behavior is appropriate and what they will accept from their members. This means that firms with high ambiguity surrounding practices that might fall outside the acceptable norms will be better off than firms with low ambiguity

P5: Normative isomorphism will increase the positive relationship between causal ambiguity and competitive advantage for firms with high ambiguity surrounding unacceptable practices.

With normative isomorphic pressures there are rules and understandings that are followed because that is just the way things are done. Firms that have low ambiguity surrounding questionable practices will have pressure to discontinue those practices or face the consequences of illegitimacy.

P6: Normative isomorphism will increase the negative relationship between causal ambiguity and competitive advantage for firms with low ambiguity surround unacceptable practices.

Future Research

In the future, researchers should recognize both causal ambiguity and institutional isomorphism as components of sustainable competitive advantage. More generally, future inquiry should acknowledge the potential role for isomorphism in research contexts in which the RBV and institutional theories offer conflicting predictions.

Future research can begin to examine empirically the 6 predictive dimensions hypothesized above, for purposes of predicting the likelihood of a sustainable competitive advantage in the face of isomorphic pressures.

Conclusion

The RBV and institutional theories seem to predict opposite results from firm behavior being understood or not understood. This paper attempts to resolve this conflict by showing that institutional predictions merely moderate the relationship between causal ambiguity and competitive advantage. The RBV seems to give the correct predictions but the results are amplified by the predictions of institutional theory.

Barney, J. 1991. Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1): 99.

Beckert, J. 1999. Agency, Entrepreneurs, and Institutional Change. The Role of Strategic Choice and Institutionalized Practices in Organizations. Organization Studies (Walter de Gruyter GmbH & Co. KG.), 20(5): 777-799.

Deephouse, D. L. 1996. DOES ISOMORPHISM LEGITIMATE? Academy of Management Journal, 39(4): 1024-1039.

Deephouse, D. L. 1999. To be different, or to be the same? It's a question (and theory) of strategic balance. Strategic Management Journal, 20(2): 147.

DiMaggio, P. J., & Powell, W. W. 1983. THE IRON CAGE REVISITED: INSTITUTIONAL ISOMORPHISM AND COLLECTIVE RATIONALITY IN ORGANIZATIONAL FIELDS. American Sociological Review, 48(2): 147-160.

Haunschild, P. R. 1993. Interorganizational Imitation: The Impact of Interlocks on Corporate Acquisition Activity. Administrative Science Quarterly, 38(4): 564-592.

King, A. W. 2007. DISENTANGLING INTERFIRM AND INTRAFIRM CAUSAL AMBIGUITY: A CONCEPTUAL MODEL OF CAUSAL AMBIGUITY AND SUSTAINABLE COMPETITIVE ADVANTAGE. Academy of Management Review, 32(1): 156-178.

King, A. W., & Zeithaml, C. P. 2001. COMPETENCIES AND FIRM PERFORMANCE: EXAMINING THE CAUSAL AMBIGUITY PARADOX. Strategic Management Journal, 22(1): 75.

Levitt, B., & March, J. G. 1988. ORGANIZATIONAL LEARNING. Annual Review of Sociology, 14(1): 319.

Lippman, S. A., & Rumelt, R. P. 1982. Uncertain imitability: an analysis of interfirm differences in efficiency under competition. Bell Journal of Economics, 13(2): 418-438.

Meyer, J. W., & Rowan, B. 1977. Institutionalized Organizations: Formal Structure as Myth and Ceremony. American Journal of Sociology, 83(2): 340-363.

Reed, R., & DeFillippi, R. J. 1990. Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage. Academy of Management Review, 15(1): 88-102.

Reger, R. K., & Huff, A. S. 1993. STRATEGIC GROUPS: A COGNITIVE PERSPECTIVE. Strategic Management Journal, 14(2): 103-123.

Simonin, B. L. 1999. Ambiguity and the process of knowledge transfer in strategic alliances. Strategic Management Journal, 20(7): 595-623.

Suchman, M. C. 1995. MANAGING LEGITIMACY: STRATEGIC AND INSTITUTIONAL APPROACHES. Academy of Management Review, 20(3): 571-610.

Zollo, M., & Winter, S. G. 2002. Deliberate Learning and the Evolution of Dynamic Capabilities. Organization Science, 13(3): 339-351.