

## Sources of Innovation : Stakeholder Theory Perspective

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### Abstract

Innovation has become a key distinct feature of modern industrial society. It is generally recognized that new knowledge and technology are one of the most important sources of innovation. However, because of their limited resources, firms can not pursue all the promising new knowledge and technology that have possibilities to be developed into critical innovation.

In this article, using the stakeholder theory, we try to establish a new conceptual model that can be used for understanding knowledge creation and innovation in society. In a society, there exist diverse socio-economic groups that have conflicting values and interests. Our stakeholder theory perspective on innovation claims that innovation can occur only when new solutions can satisfy their idiosyncratic stakeholder' values and interests better than current existing solutions. From the viewpoint of stakeholder innovation theory, there could be three different types of innovation: value improvement innovation, non-traditional value Innovation, and innovation for non-traditional stakeholder.

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## I . Introduction

Innovation has become a distinct feature of modern industrial society. In these days, we can easily find the new products (or services) that did not even exist a couple of years ago. Firms are persistently trying to add new technological features and design enhancements to their existing products. Only continuous innovative activities can make firms gain and sustain their competitive advantages. Because of this tendency, innovation management and entrepreneurship have increasingly become an important topic in management.

It is generally recognized that new knowledge and technology are one of the most important sources of innovation (Schumpeter, 1934; Rosenberg, 1976; Dosi, 1988; Cohen & Levinthal, 1990). Most innovative ideas tend to be developed from seed knowledge and technology that has been originally created by other organizations (March & Simon, 1958; Arrow, 1962; Cohen & Levinthal, 1990). Without acquiring effective outside knowledge and technology, most firms cannot maintain or improve their competitive positions (Cohen & Levinthal, 1990). However, because of their limited resources, firms cannot pursue all the promising new knowledge and technology that have possibility to be developed into critical innovation. Thus, firms tend to focus more on knowledge management and technology adoption.

There have been numerous models in the area of knowledge and technology management. Some theories have been proved to be very useful in managing incremental innovation within existing business environments. However, as Miller (1999) explicitly argued, these models have a serious limitation in overcoming core barriers to innovation. They are vulnerable to new radical or disruptive innovations outside the existing dominant design (Ghemawat, 1991; Henderson, 1993; Christensen, 1997; Miller, 1999).

In this article, we claim that the stakeholder theory can be used for identifying future innovation (Lee, 2002). The stakeholder theory has been recognized as one of the most realistic views of the organization (Donaldson

& Preston, 1995). The theory is based on the concept of stakeholder as any groups or individuals who can affect or affected by the achievements of the organization's objectives (Freeman, 1984; p. 46). Even though very few stakeholder theorists have used stakeholder theory to understand technology and knowledge management, we claim that stakeholder theory can be used for understanding knowledge creation and innovation because they tend to be strongly induced by ex post stakeholder inefficiencies in society. In other words, we claim, by examining diverse stakeholder values and interests, we can identify future radical or discontinuous innovation.

Our approach has the following advantages. First, since stakeholder theory can capture socio-cultural aspects of business environments, we can identify the promising opportunities that can be created from the changes of a society's attitude and cultural values (Low & MacMillan, 1988; Gnyawali & Fogel, 1994). Second, since stakeholder theory is built on the assumption that laws and regulations can be changed, we can identify the promising opportunities that can be generated form the changes of laws and regulations. Third, since stakeholder theory recognizes the very existence of NGOs, media, and social institutions that can pressure government policies, laws and social attitudes, we can catch the promising opportunities that can be produced from effective environmental activisms and concrete social movements. Fourth, only by adopting a social network and stakeholder theory perspective, we can accurately predict social changes in the capitalistic society. Because a society is a set of evolutionary systems of interactions among individuals and organizations (Parsons & Smelser, 1956; Reynolds, 1991), without adopting stakeholder theory, we can not explain the co-evolution processes of multilevel social networks and organizations..

In this article, we begin our discussion with a brief review of existing literature on innovation. Then, we explain why stakeholder theory is more appropriate for identifying future innovation. From the viewpoint of our stakeholder innovation theory† there could be three different types of innovation: Value improvement innovation, Non-traditional value innovation, and Non-traditional stakeholder innovation. As an illustration of the stakeholder innovation theory, a case regarding the electric car is discussed.

## II . Literature Review

Innovation has become a distinct feature of modern industrial society. Where, when, and how new innovative opportunities will be created? Scholars have provided numerous answers to these questions over many years of research. However, because of its complexity, there are still serious gaps in explaining this important economic and social phenomenon. It is well known that even established organizations with abundant financial resources and excellent human resources still have difficulty in managing radical innovations (Penrose, 1995; Cohen & Levinthal, 1991).

Regarding this sources of innovation, we recognize that there have been two dominant streams of research activities. One stream of researchers have focused on examining new knowledge and technology that would consequently lead to innovation, while the other stream of researchers have focused on investigating demand side factors that would induce entrepreneurs to perform R&D (Dosi, 1988). These research trends might be reflected on the very meaning of innovation. Innovation consists of two separate processes, innovative knowledge creation and getting necessary supports from stakeholder.

Since the Adam Smith's story of the pin factory had been introduced, the creation of new knowledge and technology has been recognized as one of the major sources of innovation. In neoclassic economics, however, knowledge and technology was rarely examined because it was treated as exogenous factors that would be constantly changed with time (Solow, 1957). However, knowledge and technology will not be given automatically. Only through constant search and learning, individuals or organizations can gain necessary knowledge and technology that may lead to innovation (Simon & March, 1958; Arrow, 1962). Nelson & Winter (1982) emphasized operating routines of organizations because the content of acquired knowledge tend to be determined by search processes.

Even though the creation of innovative knowledge and technology involves considerable uncertainty, this does not mean it is completely unpredictable

(Dosi, 1988). The knowledge and technology that can get market demand tend to be produced much more rapidly. For example, during 1960–1983, only one-tenth of the R&D expenditures in US had been spent for pure research while the remaining were held for applied research and development (Dosi, 1988).

Some researchers have focused on this demand-side of innovation. Hicks (1932) originally claimed that innovation tended to be spurred only to the direction of expensive labor costs. However, Salter (1960), Fellner (1961), Samuelson (1965), and Rosenberg (1976) challenged Hick's arguments. They argued, as far as innovations could reduce future production costs, some entrepreneurs would surely pursue them. The entrepreneur is interested in reducing costs in total, not particular costs such as labour costs or capital costs (Salter, 1960: p. 43). After examining 111 innovations in scientific instruments, von Hippel (1977) evidenced that, in about 80% of the examined cases the customer's input had been the most important factor of innovation. However, customers may not know their needs or what kinds of products are possible. Following the Abernathy & Utterback (1978)'s model, Clark (1985) also proposed the customer-design interaction model that could be explored for analyzing the technological change because technology development processes tended to evolve through the interactions between customer needs and designer responses. Recently, following the Nonaka spiral process, Miller (1999) propose the 4G spiral process of capability and architecture to facilitate mutual learning between customers and organizations.

However, market needs are not the only sources of innovation. In the Competitive Advantage, Porter (1985) also argued that competitive advantage could come from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its product (Porter, 1985; p. 33). The creative development processes tend to be dependent on both inputs and knowledge of various divisions, such as R&D, Marketing and Sales, Manufacturing, and Finance, in the organizations (Dougherty, 1992). Thus, in order to manage innovation, we need to examine all the environment of the organization.

Some researchers have claimed that innovation tends to be induced by

allocative inefficiencies. Different organizations have different goals and should deal with different sets of stakeholder, so simple economic or financial efficiency cannot be an appropriate tool for evaluating various organizations in diverse environments. As North (1990) argued, The systematic investment in skills and knowledge and their application to an economy suggests a dynamic evolution of that economy that entails a specific set of institutional characteristics. A description of these characteristics requires us to think of the issues of efficiency in a context different than straightforward allocative efficiency (p. 80).

### III. Stakeholder Theory Framework

The stakeholder theory is theorized based on the concept of stakeholder who have a variety of relationships with the organization. Since the organization interacts with a variety of stakeholder, different stakeholder having different values and interests may cause conflicts within the organization. In order to gain necessary supports from its stakeholder, the organization should interact with stakeholder, identify their values and interests, and try to satisfy their needs or reconcile conflicting interests.

Most of theories in innovation management focus on very narrow sets of groups such as customers, owners, employees, and suppliers, but stakeholder theory extends its scope of analysis to social values and social stakeholder including governments, competitors, NGOs, and media. Because of these features stakeholder theory has been recognized as one of the most realistic views of the organization (Brennner & Cochran, 1991). Intrinsic values are basic human values that are to be pursued for their own sake, while there are values, instrumental values, which usually take the role of instruments in achieving basic human values. Freeman (1984) pointed out, Many of the activities in which an organization engage daily are instrumentally valuable, because they lead to attainment of the intrinsic values of organization and its members (p. 97). The stakeholder theory can be used as a framework that can help us to recognize inefficiencies, identify critical knowledge gaps, and

create innovation in a specific organization context. However, until recently, very few stakeholder theorists have used stakeholder theory to understand innovation (i.e., identifying and creating new values), even though many stakeholder theorists have focused on the ethical issues (i.e., managing and integrating the values and interests of stakeholder) of existing organizations. Our position is, similar to allocative inefficiency, inefficiencies should be identified in a specific organizational context.

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We argue that, by employing stakeholder theory, top executives can easily identify critical inefficiencies, search relevant innovative knowledge and technology, and invest their resources to create innovation. Fig. 1 displays the role of stakeholder theory in identifying innovative opportunities in a specific organizational context. Even though stakeholder theory was originally developed for strategic management, the theory has been used for in diverse disciplines including ethics, law, economics, strategy, and organization theory.

Depending on research needs, researchers tended to use a variety of definitions of stakes and stakeholder. Social scientists and economists tend to have strong interests in the nature of a particular organization's stakeholder and have developed descriptive stakeholder theory (Jones, 1994). On the other hand, ethicists tend to focus on moral obligations to the organization's stakeholder and have developed normative stakeholder theory (Evans & Freeman, 1983). Even though researchers (e.g. Mitchell, Agle, & Wood, 1997; Brenner & Cochran, 1991) have started to research the descriptive stakeholder theory, the development of the descriptive theory is still in a primitive stage and it needs further developments to be used for empirical researches (Jones & Wicks, 1999). Recently, Jawahar & McLaughlin (2001) proposed that the nature of stakeholder relationships tended to be changed as the organization evolved to different stages. Because different organizations tend to have different strategies, markets, products, and sizes, organizations are generally quite different even though

they are in the same industry and market (Rumelt, 1987). Thus, we can conjecture different organizations usually have different stakeholder relationships with their different sets of stakeholder. The implication is that, in order to draw some important conclusions, organization samples used for empirical comparison researches should be carefully identified and selected. Following the social science tradition, our study will be based on the descriptive stakeholder theory, but our focus is not on the identification or the salience of stakeholder. Rather, we are interested in understanding the changing nature of stakeholder relationships as innovative products or services are introduced and replace the existing products or services.

#### IV. Strategic Stakeholder Inefficiencies

We think there could be always inefficiencies if we carefully examine the stakeholder relationships of a specific organization. The reasons are as follows. First, due to intrinsic mismatches between stakeholder' interests and organizational interests, there can be ex ante innovative opportunities for improvements (Frooman, 1999). Second, because of social, political, demographic, legal, and economic forces of environments, stakeholder' values and interests can be changed and these changes might create new innovative opportunities (Drucker, 1985; Venkataraman, 1997). Third, even though there were very little ex ante mismatches between stakeholder' interests and organizational interests, new knowledge and technology that may create innovation can provide stakeholder better values.

Even though there can be numerous stakeholder inefficiencies, not all of them should draw the top executive's attention. Only when, by employing new knowledge and technology, those stakeholder inefficiencies can be resolved without affecting other stakeholder relationships, top executives need to draw their strong attention to the stakeholder inefficiencies, called as strategic stakeholder inefficiencies (Burgelman & Grove, 1996). These relationships are illustrated in Fig. 2.



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For example, electric cars can be manufactured even now and air pollution problems can be solved right away. However, customers would not accept the current electric cars because of high costs and inconveniences. In this case, we cannot say the electric car is an example of strategic stakeholder inefficiencies.

## V. Innovation in Stakeholder Framework

As the primary question of the resource-based view of the organization center around the nature of resource values, e.g. where, when, and how do particular resources become valuable (Priem & Butler, 2001a; 2001b), in stakeholder theory, the primary questions center should be the very nature of stakeholder relationships such as, who are the key stakeholder (the identity of stakeholder)? and what are the key values and interests of stakeholder (identification of values and interests of stakeholder) and what are the influences of stakeholder (the salience of stakeholder)? Researches in business strategy showed that organizations could be quite different even though they were in the same industry. Thus, different organizations tend to have quite different sets of stakeholder. As business environments changed, the nature of the stakeholder relationships would be changed as well.

Following Professor Schumpeter (1934)'s arguments, many researchers have accepted that innovation is synonymous to creating greater values. Because innovative products (or services) cannot replace the existing ones if the former cannot satisfy their stakeholder better than the latter, the argument should be valid.

**Proposition 1:** *Innovation can occur when it can deliver greater values to its stakeholder.*

In order to gain continuous supports from diverse stakeholder, the organization should satisfy its stakeholder' needs. However, the critical need can be changed as time goes by. For example, the reason why 14 inch disk drives had its own distinctive market demands at the beginning was that the capacity of disk drives was extremely important in the main frame market (in 1970s) and 8 inch or smaller disk drives could not fulfill this demands. At that time, the critical customer need was the capacity of disk drives only. However, as technology had improved, in addition to the capacity, the size of disk drives that could allow the size of mainframe computers smaller tended to become more important. Thus, the critical consumer need was shifted into the size of disk drives at the end.

Schumpeter (1942) also claimed that, in some day, human's most basic wants were so completely satisfied and the new wants, the heterogony of aims (p. 131) tended to emerge. As illustrated in the Development as freedom (Sen, 2000), people in underdeveloped countries might danger their lives for foods and basic supplies because, without them, they could not be survived in any case. On the other hand, most of underdeveloped countries tend to lose their political freedom, while most of developed countries tend to give strong political freedom to their people. In addition, most of underdeveloped countries have the factories that could create serious air pollutions or produce toxic materials while most of developed countries try to move those factories to other countries. These examples are consistent with the theory of the Maslow's hierarchy of needs. According to Abraham Maslow, people tend to have five need levels that constitute a need hierarchy. The strongest needs of people is the physiological needs such as food, sex, and air which is the most basic needs. Only after the physiological needs are satisfied, the other needs, the security needs, the belongingness needs, the esteem needs, and the self-actualization needs can be primary motivational factors.

At the beginning, economic values of people tends to be generally much stronger than social, political, or ethical values even though, in some society, a few social, political, or ethical values might be very important due to historical, religious or cultural reasons. However, as innovation occurs and economic conditions tend to be improved, economic needs would be

generally well served. At this point, the importance of social, political, or ethical needs tend to become very important comparable to those of economic values. A series of democratic movements in developing countries might not be irrelevant to this tendency. The growing importance of consumer advocates, environmentalists, and NGOs in the world might not be irrelevant to this tendency.

**Proposition 2:** *Innovation can occur when it can deliver non-traditional values to stakeholder.*

Recent trends in stakeholder theory are the identifications of key stakeholder and the classifications of various stakeholders' influences (Clarkson, 1995; Rowley, 1997; Mitchell, et al., 1997; Agle, Mitchell, & Sonnenfeld, 1999). Based on the continuity of transactional participation and the effect to the survival of the organization, Clarkson (1995) differentiated the primary stakeholder group from the secondary stakeholder group. Rowley (1997), on the other hand, employed two features, density and position, of stakeholder network relationships to understand influences of various stakeholder. Rowley (1997) argued that the influences of an organization to its stakeholder tend to be dependent on the network density, while the influences of stakeholder tend to be proportional to an organization's importance in stakeholder network positions. Mitchell, et al. (1997) proposed that three attributes, power, legitimacy, and urgency, from many organization theories could be used for the identification of key stakeholder and the salience of various stakeholder. He claimed that the salience of stakeholder tended to be proportional to the cumulative number of the stakeholder attributes (Agle, et al., 1999). For the developments of descriptive stakeholder theories, researchers might empirically analyze three attributes of stakeholder or the two features of stakeholder network relationships at a time. However, our interests in this paper are that both three stakeholder attributes and two features of stakeholder network relationships tend to be changed as time goes by. For example, power was defined as the probability that one actor within a social relationship would be

in a position to carry out his own will despite resistance (Weber, 1947; Mitchell, et al., 1997: p. 865). Legitimacy was also defined as generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, definitions (Mitchell, et al., 1997; p. 869). In addition, the degree of urgency tends to be increased as stakeholder claim call for immediate attention more (Mitchell, et al., 1997; p. 869).

One of the most interesting facts is that social, political, and legal groups tend to become much more important stakeholder as time goes by. By illustrating the historic changes of the organization and managerial role, Ansoff (1979) argued, research on goals and objectives has traditionally been based on the assumption that the major influence on goals were to be found within the firm. The 1970–1980s perception suggests that the goals and objectives are going to be increasingly influenced by external influences (p. 43). As mentioned earlier, before 1960s, there was little probability for environmentalists, consumer advocates, and NGOs to influence organizational activities. In other words, social, political, and legal groups who have little power formerly tend to gain more power these days. Similarly, as time passes, the legitimacy and the urgency of external stakeholder also increase. Because the salience of external stakeholder and the number of key stakeholder tend to be proportional to three stakeholder attributes, power, legitimacy, and urgency, we can obtain the following propositions.

**Proposition 3:** *Innovation can occur when it can satisfy more stakeholder.*

## VI. Radical Innovation in Stakeholder Framework

Researchers in management have distinguished between incremental innovations and radical innovations. It is generally recognized that the existing organizations are vulnerable to the radical innovations, while entrepreneurial organizations are sources of radical innovation. There have been numerous definitions of radical innovation and incremental innovation

depending on their research focuses and interests. However, some frameworks have serious limitations in explaining innovations, while some frameworks can be only applicable to very specific organizations. In addition, existing frameworks can not offer rational reasons why top executives, who have usually high intellectual capacity, could not manage radical innovation. Different from other models using one or two variables for explaining radical innovation, we argue there could be three different kinds of inducement forces for innovation: greater values, unconventional values, and untraditional stakeholder. Schumpeter (1934) assumed the static equilibrium where values and interests of people would not be affected by pure external changing factors such as economic, political, demographic, social, and legal factors. However, in addition to new knowledge or technologies, those external factors also initiate changes in the nature of stakeholder, the stakeholder identity issue, the stakeholder value issue, and the stakeholder salience issue (Freeman, 1984; Brenner & Cochran, 1991; Mitchell, et al., 1997). These changes might lead to innovations, so the critical issue is complexity and diversity of innovation sources. Similar to Golembiewski, Billingsley, & Yeager (1976)'s classification, we can also distinguish three different types of innovation: alpha stakeholder changes, beta stakeholder changes, and gamma stakeholder changes. If gamma stakeholder changes come in, conventional wisdoms of top executives become useless and they can not predict future threats correctly. Thus, top executives tend to neglect innovative opportunities.

## VII. Conclusion

Innovation has become a distinct feature of modern industrial society. It is generally recognized that new knowledge and technology are one of the most important sources of innovation. However, because of their limited resources, firms cannot generally pursue all the promising new knowledge and technologies that have possibility to be developed into critical innovation.

In this article, using stakeholder theory, we try to establish a new

conceptual model that can be used for understanding knowledge creation and innovation in society. There exist diverse socio-economic groups that have conflicting values and interests in society. Our stakeholder perspective on innovation claims that innovation can occur only when new solutions can satisfy their idiosyncratic stakeholder' values and interests better than current solutions. From the viewpoint of stakeholder framework, there could be three different types of radical innovation: much greater value creating innovation, non-traditional value creating innovation, and value creating to non-traditional stakeholder innovation.

## REFERENCES

- Abernathy, W. J. & Utterback, J. M.(1978), "Patterns of industrial innovation", *Technology Review*, Vol. 80, No. 7, pp. 40-47.
- Agle, B. R., Mitchell, R. K. & Sonnenfeld. J. A.(1999), "Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values", *Academy of Management Journal*, Vol. 42, No.5, pp.507-25.
- Alchian, A. A.(1950), Uncertainty, evolution, and economic theory. *Journal of Political Economy*, Vol. 58, No. 3, pp.211-221.
- Ansoff, H. I.(1979), The changing shape of the strategic problem. In D. E. Schendel & Hofer, C. W. (Eds.), *Strategic Management: A New View of Business Policy and Planning*: pp.30-44, Canada: Little, Brown & Company.
- Arrow, K.(1962), "The economic implication of learning by doing", *Review of Economic Studies*, Vol.29, pp.155-173.
- Barney, J. B.(1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol.17, pp.99-120.
- Brenner, S. N., & Cochran, P.(1991), The stakeholder theory of the firm: Implications for business and society theory and research. In J. F. Mahon (Eds.), *Proceedings of the second annual meeting of the International Association for Business and Society*, pp.449-467.
- Burgelman, R. A. & Grove, A. S.(1996), "Strategic dissonance", *California Management Review*, Vol.38, No.2, pp.8-28.
- Cassan, M.(1982), *The entrepreneur: An economic theory*, Totowa, N.J.: Barnes & Noble Books.
- Christensen, C. M.(1997), *The innovator's dilemma: When new technologies cause great firms to fail*, Boston: Harvard Business School Publishing.
- Clarkson, M. B. E.(1995), "A stakeholder framework for analyzing and evaluating corporate social performance", *Academy of Management Review*, Vol.20, No.1, pp.92-117.

- Clemence, R. V., & Doody, F. S.(1966), *The Schumpeterian system.1950. Reprint*, New York: Augustus M. Kelly.
- Cohen, W. M., & Levinthal, D. A.(1990), "Absorptive capacity: A new perspective on learning and innovation", *Administrative Science Quarterly*, Vol.35, No.1, pp.128-152.
- Commons, J. R.(1934), *Institutional economics: its place in political economy*, New York: The Macmillan Company.
- Dees, J. G. & Starr, J. A.(1992), Entrepreneurship through an ethical lens: Dilemmas and issues for research and practice. In D. Sexton & J. Karsarda (Eds.), *The State of the Art in Entrepreneurship*: pp.89-116. Boston, MA: PWS-Kent Publishing Co.
- Dierickx, I., & Cool, K.(1989), "Asset stock accumulation and sustainability of competitive advantage", *Management Science*, Vol.35, No.12, pp.1504-1511.
- Donaldson, T., & Preston, L. E.(1995), "The stakeholder theory of the corporation: Concepts, evidence, and implications", *Academy of Management Review*, Vol.20, No.1, pp.65-92.
- Dosi, G.(1982), "Technological paradigms and technological trajectories: A suggested interpretation of the determinants and directions of technological change", *Research Policy*, Vol.11, No.3, pp.147-162.
- Dosi, G.(1984), *Technical change and industrial transformation*, London: Macmillan.
- Dosi, G.(1988), "Sources, procedures, and microeconomic effects of innovation", *Journal of Economic Literature*, Vol.26, No.3, pp.1120-1171.
- Dougherty, D.(1992), "A practice-centered model of organizational renewal through product innovation", *Strategic Management Journal*, Vol.13, No.1, pp.77-92.
- Dougherty, D. & Heller, T.(1994), "The illegitimacy of successful product innovation in established firms", *Organization Science*, Vol.5, No.2, pp.200-218.
- Drucker, P. F.(1985), *Innovation and entrepreneurship: practice and principles*, New York: Harper & Row.
- Evans, W. & Freeman, R. E.(1983), A stakeholder theory of the modern

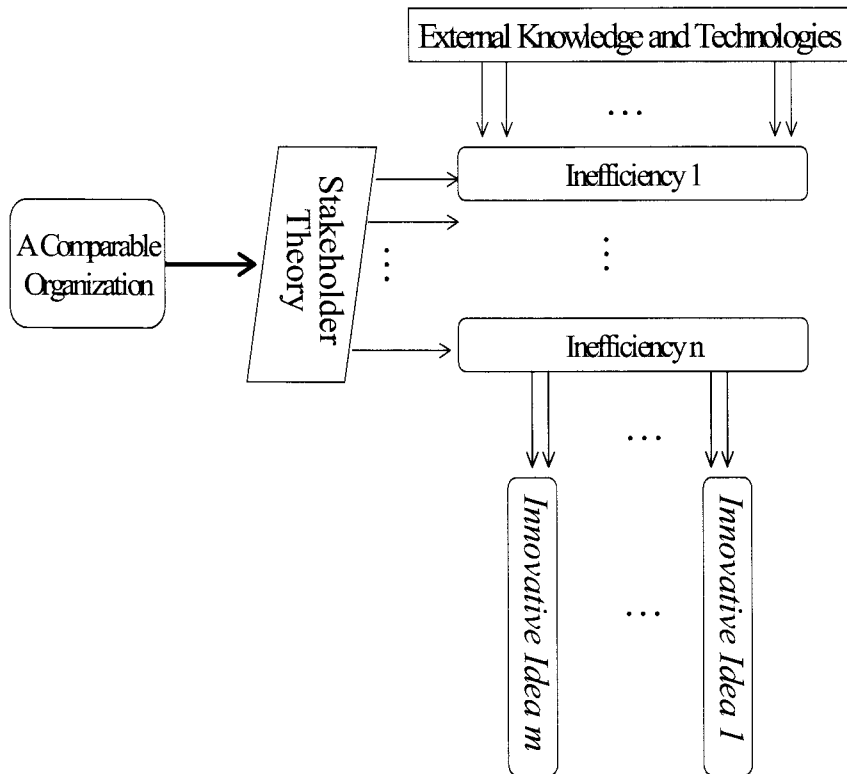


- corporation: Kantian Capitalism. In T. Beauchamp & N. Bowie (Eds.), *Ethical theory and Business*: 75-93. Englewood Cliffs, NJ: Prentice Hall.
- Fellner, W.(1961), "Two propositions in the theory of induced innovation", *Economic Journal*, Vol.71, pp.305-308.
- Freeman, R. E.(1984), *Strategic management: A stakeholder approach*, Marshfield, MA: Pitman Publishing.
- Freeman, R. E.(1999), "Divergent stakeholder theory", *Academy of Management Review*, Vol.24, No.2, pp.233-236.
- Frooman, J.(1999), "Stakeholder influence strategies". *Academy of Management Review*, Vol.24, No.2, pp.191-205.
- Gnyawali, D. R. & Fogel, D. S.(1994), "Environments for entrepreneurship development: Key dimension and research implications", *Entrepreneurship Theory and Practice*, Vol.18, No.4, pp.43-62.
- Golembiewski, R. T., Billingsley, K. & Yeager, S.(1976), "Measuring change and persistence in human affairs: Types of change generated by OD designs", *Journal of Applied Behavior Science*, Vol.12, pp.133-157.
- Grenovetter, M.(1973), "The strength of weak ties", *American Journal of Sociology*, Vol.78, No.6, pp.1360-1380.
- Grove, A. S.(1996), *Only the paranoid survive*, New York, NY: Currency and Doubleday.
- Hamel, G. & Prahalad, C. K.(1996), *Competing for the future*, Boston, MA: Harvard Business School Press.
- Hayek, F. A.(1945), "The use of knowledge in society", *American Economic Review*, Vol.35, No.4, pp.519-530.
- Hicks, J. R.(1932), *The theory of wages.*, London: Macmillan.
- James, W.(1975), *Pragmatism*, Cambridge, MA: Harvard University Press.
- Jawahar, I. M. & McLaughlin, G. L.(2001), "Toward a descriptive stakeholder theory: An organizational life cycle approach", *Academy of Management Review*, Vol.26, No.3, pp.397-414.
- Kirzner, I. M.(1979), *Perception, opportunity, and profit: studies in the theory of entrepreneurship*, Chicago: University of Chicago Press.
- Khun, T. S.(1960), *The structure of scientific revolutions*, Chicago: University of Chicago Press.

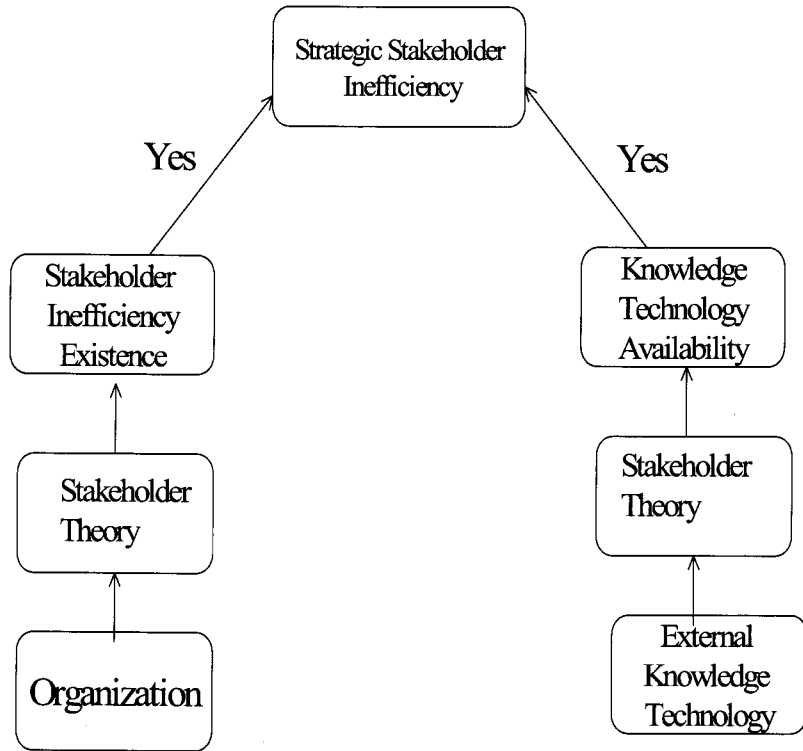
- Low, M. B. & Abrahamson, E.(1997), "Movements, bandwagons, and clones: Industry evolution and the entrepreneurial process", *Journal of Business Venturing*, Vol.12, No.6, pp.435-457.
- Low, M. B. & MacMillan, I. C.(1988), "Entrepreneurship: past research and future challenges", *Journal of Management*, Vol.14, No.2, pp.139-161.
- March, J. G. & Simon, H. A.(1958), *Organizations*, New York: Wiley.
- McClelland, D. C.(1961), *The achieving society*, Princeton, NJ: von Nostrand.
- McFarling, B.(2000), "Schumpeter's entrepreneurs and Commons' sovereign authority", *Journal of Economic Issues*, Vol.34, No.3, pp.707-721.
- Mitchell, R. K., Agle, B. R. & Wood, D. J.(1997), "Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts", *Academy of Management Review*, Vol.22, No.4, pp.853-886.
- Moran, P. & Ghoshal, S.(1999), "Markets, firms, and the process of economic development", *Academy of Management Review*, Vol.24, No.3, pp.390-412.
- Nelson, R. R. & Winter, S. G.(1982), *An evolutionary theory of economic change*, Cambridge, MA: Belknap Press.
- North, D. C.(1990), Institutions and a transaction-cost theory of exchange, In J. E. Alt & K. A. Shepsle (Eds.), *Perspectives on positive political economy*: 182-194. New York: Cambridge University Press.
- Parsons, T. & Smelser, N. J.(1956), *Economy and society*, Glencoe, IL: Free Press.
- Penrose, E.(1995), *The theory of the growth of the firm: 3rd Edition*, New York: Oxford University Press.
- Porter, M. E.(1985), *Competitive advantage: creating and sustaining superior performance*, New York: Free Press.
- Priem, R. L. & Butler, J. E.(2001a), "Is the resource-based view a useful perspective for strategic management research?", *Academy of Management Review*, Vol.26, No.1, pp.22-40.
- Priem, R. L. & Butler, J. E.(2001b), "Tautology in the resource-based view and the implications of externally determined resource value: Further comments", *Academy of Management Review*, Vol.26, No.1, pp.57-66.
- Reynolds, P. D.(1991), "Sociology and entrepreneurship: Concepts and

- contributions", *Entrepreneurship Theory and Practice*, Vol.16, No.2, pp.47-50.
- Reynolds, P. D. & White, S. B.(1997), *The entrepreneurial process: Economic growth, men, women, and minorities*, Greenwood Publishing Group.
- Rose-Ackerman, S.(1996), "Altruism, nonprofit, and economic theory", *Journal of Economic Literature*, Vol.34, No.4, pp.701-728.
- Rosenberg, N.(1976), *Perspectives on technology*, Cambridge: Cambridge University Press.
- Rowley, T. J.(1997), "Moving beyond dyadic ties: A network theory of stakeholder influences", *Academy of Management Review*, Vol.22, No.4, pp.887-910.
- Rumelt, R. P.(1987), Theory, strategy, and entrepreneurship, In D. J. Teece (Eds.), *The Competitive Challenge*. Cambridge, MA: Ballinger: 137-158.
- Salter, W. E. G.(1960), *Productivity and technical change*, Cambridge: Cambridge University Press.
- Samuelson, P. A.(1965), "A theory of induced innovation along Kennedy-Weisacker lines", *Review of Economics and Statistics*, Vol.47, No.4, pp.343-356.
- Sen, A. K.(1999), *Development as freedom*, New York: Oxford University Press.
- Schumpeter, J. A.(1934), *The theory of economic development*, Cambridge, MA: Harvard University Press.
- Schumpeter, J. A.(1942), *Capitalism, socialism, and democracy*, N.Y.: Harper & Row.
- Schumpeter, J. A.(1947), "Theoretical problems: Theoretical problems of economic growth", *Journal of Economic History*, Vol.7, pp.1-9.
- Simon, H. A.(1991), "Organizations and markets", *Journal of Economic Perspectives*, Vol.5, No.2, pp.25-44.
- Solow, R. M.(1957), "Technical change and the aggregate production function", *Review of Economics and Statistics*, Vol.39, No.3, pp.312-320.
- Stewart, J. M.(1993), "Future state visioning-A powerful leadership process", *Long Range Planning*, Vol.26, No.6, pp.89-98.

- Swedberg, R.(1991), *Joseph Schumpeter: his life and work*, Cambridge: Polity Press.
- Teal, E. J. & Carroll, A. B.(1999), "Moral reasoning skills: Are entrepreneurs different?", *Journal of Business Ethics*, Vol.19, No.3, pp.229-240.
- Teece, D. J.(1998), "Research directions for knowledge management", *California Management Review*, Vol.40, No.3, pp.289-292.
- Van de Ven, A. H.(1993), "The development of an infrastructure for entrepreneurship", *Journal of Business Venturing*, Vol.8, No.3, pp.211-230.
- Van de Ven, A. H., Polley, G. & Venkataraman, S.(1999), *The innovation journey*, New York: Oxford University Press.
- von Hippel, E.(1977), "The dominant role of the user in semiconductor and electronic subassembly process", *IEEE Transactions on Engineering Management*, Vol.24, No.2, pp.60-71.
- von Hippel, E.(1988), *The sources of innovation*, New York: Oxford University Press.
- Weber, M.(1947), *The theory of social and economic organization*, New York: Free Press.
- Williamson, O. E.(1985), *The economic institutions of capitalism*, New York: MacMillan.



<Figure 1> Role of the Stakeholder theory in identifying entrepreneurial opportunities



<Figure 2> Strategic Stakeholder Inefficiency