

Exploring the Marketing-Entrepreneurship Interface

**J. Brock Smith
Ron K. Mitchell
University of Victoria**

Please direct correspondence to:

J. Brock Smith, Ph.D.
Faculty of Business
University of Victoria
P.O. Box 1700
Victoria, B.C., Canada
V8W 2Y2

Ph: 250-721-6070
Fx: 250-721-6067
Smithb@Uvic.ca

Authors Note.

J. Brock Smith is an Associate Professor of Marketing, Faculty of Business, University of Victoria, Canada. Ron K. Mitchell is a Professor of Entrepreneurship, Faculty of Business, University of Victoria, Canada.

**Transaction Cognition Theory:
Implications for the Marketing-Entrepreneurship Interface**

Abstract

Transaction-cognition theory addresses the issue of how value is created and how firms, and other more-aggregated transaction streams (such as industries or economies), are formed. This theoretical perspective provides a foundation for further theory-based research at the marketing-entrepreneurship interface. Implications of transaction – cognition theory for marketing researchers, educators, and practice are discussed.

Introduction

There is growing research interest in the marketing-entrepreneurship interface (MEI) evidenced by the 1999 launch of the *Journal of Research in Marketing & Entrepreneurship* and a recent special issue of the *Journal of Marketing Theory and Practice* (Spring 2000). While marketing and entrepreneurship have long been thought highly interdependent (e.g., Gardner 1991; Hisrich 1992; Slater and Narvin 1995), and both activities are fundamentally concerned with value creation, entrepreneurship research has traditionally been viewed as being a-theoretical, descriptive, and exploratory by ‘serious’ marketing scholars. This stereotype is beginning to change, however, as: 1) interest and funding for entrepreneurship programs has dramatically increased; 2) scholars have begun to flock to the field in gold-rush proportions; and 3) progress has been made by entrepreneurship and MEI scholars in addressing the issues described above (e.g., Gilmore and Coviello 1999). Yet there still lacks a unifying framework for entrepreneurship (Zahra and Dess 2001), and as concluded by Muzyka and Hills (1993), “a real lack of insight in our current [MEI] theory.” This lack of solid theoretical foundations significantly limits the potential and legitimacy of entrepreneurship and MEI research, since theory drives the research questions considered, the constructs conceived, the methods used, and the practical insights gained.

Recent entrepreneurship theory, however, sheds some new light on MEI theoretical foundations. A transaction-cognition theory has been proposed by Mitchell (2003; 2001)

as the basis for the development of a global theory of entrepreneurship. It focuses on the specific thought/action processes that produce new value in the form of new transactions and new transaction streams: addressing the question: what are the thought processes or cognitions that individuals need to create value and achieve superior economic results by adding new units – new transactions – to the marketplace. Because a single article cannot fully describe a complex theory and its implications, we position the article as an introductory attempt to pique the interest of entrepreneurship and marketing scholars, stimulate thought, and to encourage further research at the marketing-entrepreneurship interface.

Transaction Cognition Theory

Transaction Cognition Theory (TCT) (e.g., Mitchell 2003; 2001) has foundations in social cognition theory (e.g., Fiske and Taylor 1984), information processing theory (e.g., Neisser 1967), expert theory (e.g., Glaser 1984), and the institutional view of economics (e.g., Coase 1937, Commons 1924), including some concepts from transaction cost economic theory (e.g., Williamson 1991, 1975). The central focus of transaction cognition theory, in general, is the question: what are the thought processes or cognitions that individuals need to create transactions, and the multi-level aggregation of transactions to create firms, industries, and economies, and to modify their structure to achieve superior economic results? The central premises of this theory are outlined in Table 1 and are elaborated upon briefly and in-part, below. Detailed justification and discussion of these premises is available from the authors (Smith and Mitchell 2004; Mitchell 2003).

[INSERT TABLE 1 ABOUT HERE]

Premise #1 suggests that the unit of analysis of entrepreneurship, and business, is a transaction. Marketers have long focused on the concept of exchange (of value) as a fundamental unit of analysis (e.g., Houston and Gassenheimer 1987), but TCT draws on the work of Gardner (1993) who utilizes a model proposed by Csikszentmihalyi (1988) that explains the essence of a transaction to have three components (Figure 1): the “creating entity” (typically an individual, group, or organization), the “work” (typically goods, services, ideas, or other products), and the “others” (the other party to the transaction - typically customers or clients, but may also include partners, suppliers, distributors, and other parties). Although a complex transaction might occur using more than one of each component, a transaction cannot exist without at least one of each component.

[Insert Figure 1 About Here]

Premise #2 suggests that entrepreneurial value comes from the completion of new transactions. Entrepreneurship scholars have long debated the fundamental phenomenon of entrepreneurship – ranging from Schumpeter’s (1934) perspective that entrepreneurial value is created when a product concept is first brought to market (a process of creative destruction) to more recent conceptualizations of entrepreneurship as “those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production” (Shane and Venkataraman 2000).

TCT suggests that the entrepreneurial act is the completion of a new transaction or a set of new transactions streams – that is, a new exchange of value with a stakeholder.

Subsequent exchanges of the same unit of value would fall in the domain of strategic management or marketing management. The TCT perspective that the fundamental activity of entrepreneurship is the creation of new transactions or new streams of transactions does not limit the entrepreneurial act to economic transactions measured by sales, as suggested by Shane and Venkataraman (2000). Entrepreneurial acts would also include non-monetary economic exchanges (barter) and exchanges of social and environmental value (e.g., Cohen, Smith, and Mitchell 2004).

Premise #4 suggests that three sets of knowledge structures, Planning, Promise, and Competition cognitions, are required to create a transaction and sustained transaction streams. Williamson (1985: 31) identifies three special-case social structuring/contracting processes: planning, promise, and competition, which enable the organization of exchange relationships subject to transaction costs in imperfect markets. In transaction cognition theory, the knowledge structures associated with these three types of contracting are defined as planning, promise, and competition cognitions.

Planning cognitions are required in imperfect markets to reduce transaction costs related to bounded-rationality. They are concerned with developing courses of action, analytical structures, and systems to solve previously unstructured market problems that relate to the production and delivery of the “work” to the “others” in the context of frequency and uncertainty of transacting.

Promise cognitions are required in imperfect markets to reduce transaction costs related to opportunism. They help to build the mutual trust required to effect an agreement between the “creating entity” and “others,” and are concerned with the development and maintenance of exchange relationships.

Competition cognitions are required in imperfect markets to reduce transaction costs related to work specificity. They are concerned with the creation of small or large numbers bargaining positions, the development of competitive and comparative advantage, and the establishment of sustained transaction streams arising from the competitive attributes of the work.

Planning, promise, and competition cognitions represent the set of knowledge structures needed for a creating entity to create a transaction (Figure 1). While the creation of a single transaction is a necessary condition for superior economic results, it is typically not sufficient. Consequently, part of competition cognitions is thinking related to the sustainability of transaction streams – being able to replicate the creation of transactions in volume sufficient to meet the financial objectives of the creating entity.

Premise #5 suggests that the role of an entrepreneur is to use planning, promise, and competition cognitions to create units: new transactions and sustained new transaction streams. This involves being able to identify, discover, or create opportunities (e.g., Sarasvathy, Dew, and Venkataraman 2003); identify, secure, and apply resources; and create, select, implement and modify strategies. More specifically, Vesper (1996)

identifies 6 stages in the development of a venture: Searching, screening, planning/financing, set-up, start-up, and on going operations. While planning, promise, and competition cognitions are needed at each stage of development, one type is primarily dominant at each specific stage (Figure 2). Thus the entrepreneurial activity of venture creation can be viewed as two iterations of the application of competition, promise, and planning cognitions (Mitchell 2001).

Premise #6 suggests that firms exist to enable the effective and efficient creation of sustained transaction streams that create superior value for others (key stakeholders). TCT does not equate entrepreneurship with new venture creation. Transactions can be completed without organizational structures, and can be completed within existing organizational structures. New ventures are created when the act of organization enables the completion of transactions that would not otherwise be completed.

Finally, premise #7 suggests that superior economic performance results from the application and use of superior planning, promise, and competition cognitive maps / expert scripts. The efficacy of expert scripts has been demonstrated in a variety of fields such as chess (Chase and Simon 1972), computer programming (McKeithen, Reitman, Reuter, and Hirtle 1981), law enforcement (Lurigio and Carroll 1985), and physics (Chi, Glaser, and Rees 1982), as well as in entrepreneurship (Mitchell et al 2002; 2000; Mitchell and Chesteen 1995) . While expert scripts can result in thinking errors (e.g., Walsh 1995), they allow decision makers, such as entrepreneurs and managers, to

drastically improve information processing capability, make better decisions, and achieve superior results.

Since planning, promise, and competition cognitions are the knowledge structures required to identify and complete transactions, and the ability to develop sustained transaction streams (i.e., new units of value) is what produces superior economic performance, it is therefore, superiority or expertise in planning, promise, and competition cognitions that results in superior economic performance.

Implications

Transaction cognition theory has a number of implications for marketing thought, research, practice, and education. These are discussed in turn.

Implications for MEI Thought

Transaction cognition theory provides insight into the thinking and behavior patterns needed to create transactions at different levels of analysis and have been suggested to provide the foundation for the development of a global theory of entrepreneurship (e.g., Mitchell 2003). For marketing scholars, it may also serve as a useful extension to, for example, resource-advantage (R-A) theory. Where R-A theory is positioned as a general theory of competition (Hunt 2002), focusing on the process and role of competition and entrepreneurial innovation as catalysts for economic growth, it does not provide an

explanation for how the value added by economic transactions and firms is actually created. Transaction cognition theory does, and it does so across multiple levels of analysis. Because transaction cognition theory and R-A theory have similar theoretical foundations, and the premises of R-A theory are reflected in the premises of transaction cognition theory, transaction cognition theory can be viewed as an extension and possibly a more general form of R-A theory.

Both marketing and entrepreneurship scholars have struggled to define the domain of their disciplines (e.g., Day and Montgomery 1999, in the case of marketing and Venkataraman 1997, in the case of entrepreneurship). Day and Montgomery (1999) suggest that four fundamental issues serve to identify the field of marketing: 1) How do customers and consumers really behave?; 2) How do markets function and evolve?; 3) How do firms relate to their markets?; and 4) What the contributions of marketing to organizational performance and societal welfare?

Transaction cognition theory is useful for defining the entrepreneurship-marketing interface. By defining entrepreneurship as the use of transaction cognitions to organize exchange relationships that create new units of value, it concerns entrepreneurship with value creation, which is directly relevant to marketing thought. This definition also describes the distinctive domain of entrepreneurship as being about the identification, discovery, or creation of new value; explaining how goods and services come into existence.

TCT also provides insight into key constructs at the MEI – those marketing concepts that can be used to identify, discover, or create new value and facilitate exchange relationships. As noted earlier in this article, Vesper (1996) describes the venture creation process as a series of activities involving: searching, screening, planning and financing, set-up, start-up, and ongoing operations. While TCT is not limited to the equating of entrepreneurship with venture creation, this typology will be used to provide illustrative examples of how marketing concepts relate to entrepreneurship, when it is conceptualized to be the result of planning, promise, and competition cognitions.

Searching is an activity of idea generation, whereby understanding others in a marketplace, leads to identifying valued work that the creating entity can produce competitively. As illustrated in Figure 2, searching primarily involves the application of competition cognitions. While competition cognitions (creating competitive work which has an advantage in exchange-based bargaining) have become the focus of business strategy courses and research, numerous marketing concepts support the development of searching competition cognitions, such as: the marketing concept, market scanning, segmentation, consumer behavior, customer value, and new product idea generation.

[Insert Figure 2 About Here]

Screening is an activity of opportunity recognition, discovery, and/or creation (e.g., Sarasvathy, Dew, and Venkataraman 2003) and assessing the idea to estimate its promise in meeting the needs and wants of key stakeholders. As illustrated in Figure 2, screening primarily involves the application of promise cognitions. While marketing strategy

related competition cognition concepts (such as positioning, differentiation, relative advantage, SWOT analysis, the GE business screen) may be part of an effective screening process, the main focus of that process is to understand enough about the key stakeholders to assess whether or not the value proposition inherent in an idea is likely (promises) to result in superior financial results. Central screening notions that are relevant to the MEI are the application of market research concepts such as preliminary analysis, exploratory research, and detailed investigation. One key marketing concept related to this activity is the Stage Gate™ concept developed by Robert Cooper (e.g., Cooper 2001) which suggests different screening criteria need to be applied at different points of a new product development process. Value-in-use analysis might also be an important marketing concept in some screening contexts.

Planning/Financing is an activity of gathering, processing, understanding and utilizing the information needed to organize the creation and delivery of work – both at the product level and at the firm (venture) level. One outcome of this activity is typically the creation of a business plan as a precursor to the creation of a firm and its work. As illustrated in Figure 2, planning/financing primarily involves the application of planning cognitions. While these cognitions are mainly developed through business planning and finance courses and research, marketing planning concepts are also applicable. Many of these relate to the core of the business plan, and include: sales forecasting, the setting of marketing objectives, segmentation and target-market profiling, development of marketing mix strategies, and evaluation and control mechanisms. Some have argued that

marketing concepts have the most comprehensive effects on the business plan – affecting more sections in the plan than any other discipline (Mitchell 2000).

Set-up is the set of activities required to create a business that is able to competitively produce and sell its work. As illustrated in Figure 2, set-up, as it applies to the MEI, primarily involves the application of competition cognitions to identify key elements in appropriate positioning, differentiation, competitive advantage, comparative advantage and value creation strategies of work(s) (goods or services), and then create appropriate structures, systems, and cultures that create or enable these elements. While these cognitions are also developed through other business domains such as management information systems, operations and production management, and strategic management, a number of marketing concepts are applicable. The marketing domain contributes concepts that include: positioning, new product development systems, channel management, supplier and partner relationship management, marketing alliances, sales force management (recruitment training, compensation), service blueprints, service training, order processing and fulfillment systems, customer support systems, service recovery systems, franchising, and importing or exporting.

Start-up is the set of activities concerned with actually starting production and engaging in sales of the work of a venture to specific others. As illustrated in Figure 2, start-up, as it applies to the MEI, primarily involves the application of promise cognitions that enable and facilitate an effective and efficient exchange of value in a transaction by increasing trust and decreasing the transaction costs associated with opportunism and bounded

rationality of the buyer. Disciplines such as law, organization behavior, and human resource management increase promise cognitions, but more in support of marketing concepts and practices, upon which successful start-up depends. Key marketing related promise cognitions include: marketing strategy and tactics implementation, sales-force management (deployment), customer relationship management (initiation and trust development), marketing communications (including product launch tactics), market research (test marketing, confirmation of buyer behavior and decision analysis), services marketing, and inventory management, among other marketing topic areas.

Ongoing-operations is the set of activities concerned with the continued delivery of both the product(s) of the firm and the firm itself as a financial product. This includes implementation of an operations plan and the use of this plan to achieve superior economic performance. As illustrated in Figure 2, ongoing-operations, as applies to the MEI, primarily involves the application of planning cognitions, which include marketing management concepts related to: brand management, customer and stakeholder relationship management, sales-force management, and marketing communications (communication plans), among other marketing management concepts.

The domain of marketing has long been associated with the study of exchange transactions and understanding how they are developed and facilitated; and marketing and entrepreneurship have long been thought highly interdependent (e.g., Gardner 1991; Hisrich 1989). So it isn't surprising that marketing concepts are pervasive across the three cognition sets suggested by transaction cognition theory. As the previous

discussion demonstrates, marketing concepts are central to entrepreneurship, as represented by the venture creation process, and are involved in all aspects of the two iterations of competition, promise, and planning cognitions value helix required for venture creation. The concepts themselves are central to the marketing discipline but their application in the development and use of planning, promise, and competition cognitions that could be used to create transactions and sustained transaction streams is what constitutes the marketing-entrepreneurship interface.

Implications for MEI Research

Transaction cognition theory has a number of implications for research at the marketing-entrepreneurship interface. Shaw and Carson (1995) argue that for this interface to be a paradigm, it needs to address four criteria: 1) address new realities, 2) raise and answer new questions, 3) embrace new themes, and 4) legitimize new research methods. To examine the paradigmatic implications of TCT we ascertain the extent to which TCT satisfies each of these criteria.

In such an examination we observe that TCT addresses new realities, (criteria #1) by putting focus on entrepreneurial cognition and the knowledge structures needed to create value and sustained transaction streams rather than the traditional focus on the traits or characteristics of entrepreneurs (e.g., Ibrahim and Soufani 2002; McClelland 1968).

This is consistent with Day and Nedungadi's (1994) focus on managerial representations

of competitive (market) environments in mental models (knowledge structures) as alternative to conventional perspectives.

Transaction cognition theory also addresses criteria #2 by raising and answering new questions. Three among many new research questions raised, for example, are: How are planning, promise, and competition cognitions used to create value in sustained transaction streams?; What specific planning, promise, and competition cognitions are critical in different phases of venture creation?; and How are marketing related planning, promise, and competition cognitions different in new and established ventures? By identifying key planning, promise, and competition cognition constructs at different levels of analysis (e.g., Mitchell 2003) transaction cognition theory provides a foundation on which to answer these questions.

TCT theory also addresses criteria #3 by providing new perspectives on old questions. For example, one of the four central marketing issues identified by Day and Montgomery (1999) is “how do markets function and evolve?” Transaction cognition theory suggests that markets function by the application of planning, promise, and competition cognitions to create value in sustained transaction streams. They evolve by the recognition of opportunity to create sustained transactions by creating work (products) that meet changing needs, wants, and value perspectives of “others” – consumers and other stakeholders. The fundamental marketing issue “How do firms relate to their markets?” is also informed by transaction cognition theory in that promise cognitions are suggested to be how firms relate to their markets. Sustained transaction streams require expert

knowledge structures of how relationships are initiated, developed, and maintained, both in dyads and networks and transaction cognition theory suggests that investigation of these knowledge structures may enlighten this issue.

Further addressing criteria #3, TCT also suggests the embracing of new themes:

cognition, knowledge structures, expertise, sustained transaction streams, value creation, and the nature and behavior of distinct and common transaction streams. While value creation is already an established theme in marketing, it is relatively under focused (Woodruff 1997). Cognition constructs and knowledge structures are beginning to be examined in both the entrepreneurship (e.g., Mitchell, et. al. 2004) and marketing (e.g., Day and Montgomery 1994) literatures but transaction cognition theory provides a theoretical basis for such investigation at the marketing-entrepreneurship interface.

Finally, consistent with criteria #4, new research methods are required to understand and map the expert knowledge structures implied in TCT. Cognitions are difficult to measure and new and creative approaches need to be developed and legitimized to capture expert knowledge structures. Script cue recognition (e.g., Mitchell 1994) has been used successfully by Mitchell et. al, to identify the presence of expert entrepreneurial cognitions, but further work is required to validate specific expert and distracter cues. Baron and Ward (2004) summarize numerous other approaches developed by cognitive scientists that may be fruitful for measuring entrepreneurial cognition, such as: Reaction time, the number and pattern of correct responses and errors, identification tasks, such as naming, listing, or rating procedures, priming tasks, memory measures such as free recall,

decision-making and choice tasks, and behavioral and neuropsychological measures such as eye movements, electroencephalography, or functional magnetic resonance. Hindle (2004) advocates qualitative approaches for measuring entrepreneurial cognitions and outlines a canonical approach for ensuring it is done rigorously.

Implications for Practice

One of the practical implications of transaction-cognition theory is the need for entrepreneurs to identify and master expert knowledge structures – which requires a life-long approach to learning. It also supports the importance of mentors with expert knowledge structures who are willing and able to share them.

Transaction-cognition theory also suggests that developing a learning culture throughout an organization is paramount. For example, one successful entrepreneurial company, Power Measurement (an electricity measurement hardware and power conservation service provider) has a “management book of the month” club, where all employees are required to read the assigned book and participate in group discussions of the merits of the concepts and how they might be applied in their organization. This learning culture is likely one of the underpinnings of their success.

Implications for MEI Education

A key implication of transaction-cognition theory as an expert-information-processing-based theory of entrepreneurship, is that entrepreneurial expertise can be learned. The emerging transaction-cognition theory approach to entrepreneurship research suggests that there are expert entrepreneurial knowledge structures (scripts) involving planning, promise, and competition cognitions that will allow those that master them to achieve performance superiority. Mastery involves deliberate practice of the right cognitive system (content) with sufficient intensity and duration (Charness, Krampe, and Mayer 1996). Thus entrepreneurial success is not about being born with the right traits or personalities but about developing the right cognitive structure for an economic environment (Mitchell 2001). This moves entrepreneurship from the domain of the rare and privileged to the domain of the common educated person. The recent interest and increase in entrepreneurship programs around the world attests to recognition of the need for entrepreneurship education. Transaction cognition theory suggests the problem solving processes and knowledge bases (Charness, Krampe, and Mayer 1996) that need to be learned. What transaction cognition theory adds to existing marketing theory, however, is a theoretical basis for the teaching of specific marketing concepts in entrepreneurship courses and programs.

The second educational implication is that marketing is central to entrepreneurship education. Since the transaction is the unit of analysis of transaction cognition and marketing has been defined as a discipline primarily concerned with facilitating transactions it is logical to assert that much of marketing thought can be considered transaction cognitions: Specifically, that portion of our domain that explains and

improves first-order action (as previously defined). Similarly, since the disciplines of business planning and strategy have historical ties to marketing strategy (Natarajan and Bagozzi 1999), many of the transaction cognitions related to planning are also marketing planning and marketing strategy cognitions. The implication of this is that marketing thought is central to the development of expert entrepreneurship cognitions, necessitating the need for marketing educators to work with others in delivering effective entrepreneurship programs.

Conclusion

Transaction-cognition theory can be positioned as complement and extension of resource-advantage theory (e.g., Hunt 2002) that explicitly addresses the issue of how value is created and how firms, as transaction streams, are formed. Three sets of knowledge structures: planning, promise, and competition cognitions, are required by creating entities (typically individuals, groups, or organizations) to identify and create work (goods, services, and other products), initiate, facilitate, complete transactions, and sustain ongoing relationships with “others” – customers, suppliers, distributors, and other key stakeholders.

One key benefit of transaction-cognition theory is that it provides theoretical underpinnings to entrepreneurship research that enable a kind of conceptual “handshaking” between the entrepreneurship and marketing domains. By positing that superior venture performance is based, at least in part, on the expert knowledge structures

of entrepreneurs, T-C theory positions entrepreneurship as an expert domain that is better susceptible to the application of marketing concepts. By doing so, it allows researchers to draw on expert information processing and related theoretical underpinnings in providing rationale for the choice of phenomenon of interest, concepts, constructs, methods, and measures. It is also inclusive, in that traditional traits-based entrepreneurship researchers can still find a home under the cognitive perspective. Domain expertise is thought, for example, to be developed through deliberate practice of the right content, at an effective level of intensity, for a sufficient duration (e.g., Charness, Krampe, and Mayer 1996). Traits may well determine what domains are a good fit for particular entrepreneurs, their ability to learn and remember the expert knowledge structures, and may influence the extent of intensity and duration individuals are willing to practice. Moreover, the cognitive approach is not overly restrictive as cognition is a robust concept. For example, the concept of “hot” cognitions (e.g., Smith et al 1993) enables the exploration of affect and other emotional entrepreneurial responses and behaviors.

A second key benefit also delineates the marketing-entrepreneurship interface. TCT suggests that the boundary of the entrepreneurship domain is concepts concerned with the development and use of planning, promise, and competition cognitions that could be used to create new value in sustained transaction streams. Thus the marketing-entrepreneurship interface involves examination of marketing concepts that help identify, discover, or create new value and facilitate exchange relationships with others. More specifically, TCT specifies the marketing-interface as the exploration of the

marketing concepts, principles, and relationships central to expert entrepreneurial planning, promise, and competition knowledge structures. In this article we have outlined some of the key marketing concepts involved in those three sets of cognitions and further work is needed in this area.

The TCT definition of entrepreneurship, being focused on the creation of new transactions and sustained transaction streams, includes both venture creation and corporate entrepreneurship, among other value creating activities. As such, there is considerable overlap between marketing as conceptualized as a value-creating exchange process (e.g., Hunt 2002; Houston and Gassenheimer 1987) and entrepreneurship. TCT helps delineate the interface by its focus on expert knowledge structures.

In this article we have tried to pique the interest of marketing and MEI scholars with a theoretical perspective that bridges the marketing and entrepreneurship domains and provides a foundation for further theory-based research in the marketing-entrepreneurship interface. Hopefully this introduction will prompt new research that brings the power and sophistication of the marketing research skill set more easily into the domain of MEI and entrepreneurship research.

Table 1

Central Premises of Transaction Cognition Theory

- P1: A transaction, consisting of a creating entity, a created work, in an exchange with others, is the basic unit of analysis of business / economics (see Figure 1).
- P2: Entrepreneurial value comes from the completion of transactions, a first-order action that increases units of value.
- P3.1: Demand is heterogeneous across and within a level of analysis and is dynamic.
- P3.2: Information is imperfect and costly for both the creating entity and others.
- P3.3: Human motivation is constrained self-interest seeking.
- P3.4 Resource characteristics are heterogeneous and imperfectly mobile.
- P3.5. Competitive dynamics are disequilibrium-provoking, with innovation endogeneous.
- P4: Three sets of knowledge structures, Planning, Promise, and Competition cognitions, are required to create a transaction and sustained transaction streams.
- P5: The role of an entrepreneur is to use planning, promise, and competition cognitions to create units of value.
- P6: Firms exist to enable the effective and efficient creation of sustained transaction streams that create superior value for others (key stakeholders).
- P7: Superior economic performance results from the application and use of superior planning, promise, and competition cognitive maps / expert scripts.
- P8: Three countervailing sets of knowledge structures: fatalism, refusal, and dependency cognitions, limit the ability to complete transactions and achieve superior economic performance.
- P9: Transaction cognitions occur at multiple levels of analysis such that expert planning, promise, and competition cognitions enable the creation of transactions, organizations, and economies.
- P10: Planning, Promise, and Competition cognitions have universal (global) elements that are shaped by regional, cultural, or other customizing elements.

Figure 1

The Transaction Model: Knowledge Structures Required to Take Advantage of Market

Imperfections.

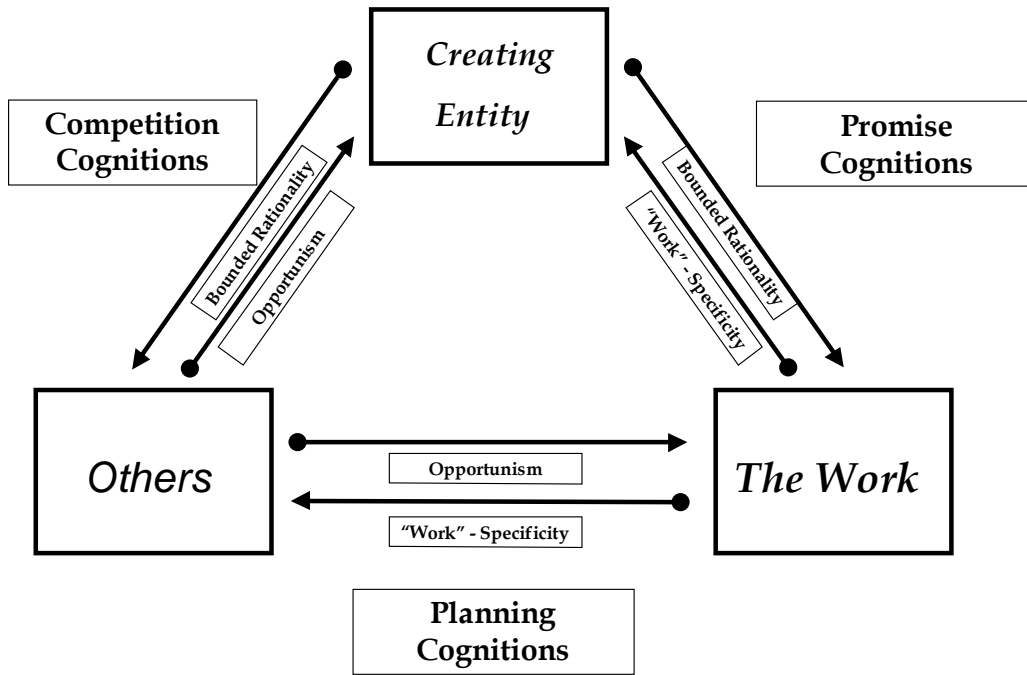
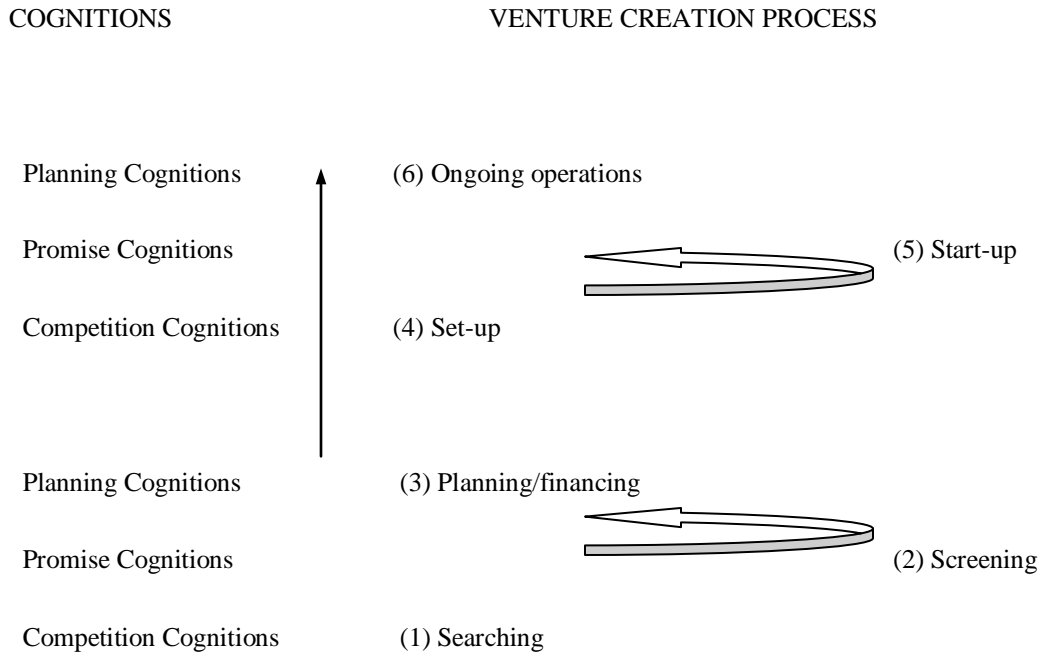


Figure 2

Knowledge Structures Associated With The Venture Creation Process



References

- Baron, Robert A. and Thomas, B. Ward (2004), "Expanding Entrepreneurial Cognition's Toolbox: Potential Contributions From the Field of Cognitive Science,"
Forthcoming: *Entrepreneurship Theory & Practice*.
- Charness, N., R. Krampe, and U. Mayer (1996), "The Role of Practice and Coaching in Entrepreneurial Skill Domains: An International Comparison of Life-Span Chess Skill Acquisition," In K.A. Ericsson (Ed.), *The Road to Excellence: The Acquisition of Expert Performance in the Arts and Sciences, Sports, and Games*. Mahwah, NJ: Lawrence Erlbaum Associates, 51-80.
- Chase, W. G., and H. A. Simon (1972), "The Mind's Eye in Chess," In W.G. Chase (Ed.), *Visual Information Processing*, New York: Academic Press, 51-80.
- Chi, M. T. H., R. Glaser, and E. Rees (1982). "Expertise in Problem Solving," In R.J. Sternberg (Ed.), *Advances in the Psychology of Human Intelligence*, Hilldale, NJ: Lawrence Erlbaum Associates, Inc., 7-75.
- Coase, R. H. (1937), "The Nature of the Firm, *Economica* New Series 4," In G.J. Stigler and K.E. Boulding (Eds.), *Reading in Price Theory*, Homewood IL: Irwin Publishing, 386-405.
- Cohen, B., J.B. Smith, and R.K. Mitchell (2004), "The Big Picture: Toward a More Comprehensive Conceptualization of Dependent Variables in Entrepreneurship Research. Working Paper Series, University of Victoria, Canada.
- Commons, J. R. (1924), *Legal Foundations of Capitalism*. New York: Macmillan.
- Cooper, Robert G. (2001), *Winning at New Products: Accelerating the Process from Idea to Launch, Third Edition*. Toronto: Harper Collins Canada Ltd.

- Csikszentmihalyi, M. (1988), "Society, Culture, and Person: A Systems View of Creativity," In R.J. Sternberg (Ed.), *The Nature of Creativity*, New York: Cambridge University Press, 325-339.
- Day, George S. and David B. Montgomery (1999), "Charting New Directions for Marketing," *Journal of Marketing*, 63, 3-13.
- _____ and Prakash Nedungadi (1994), "Managerial Representations of Competitive Advantage," *Journal of Marketing*, 58 (April), 31-44.
- Fiske, S.T. and S.E. Taylor (1984), *Social Cognition*. Reading, MA: Addison-Wesley.
- Gardner, D.M. (1991), "Exploring the Marketing/Entrepreneurship Interface," In G. Hills, R.W. LaForge, and BJ Parker (Eds). *Research at the Marketing/Entrepreneurship Interface*, University of Illinois, Chicago, IL.
- Gilmore, Audrey and Nicole Coviello (1999), "Methodologies For Research at the Marketing / Entrepreneurship Interface," *Journal of Research in Marketing & Entrepreneurship*, 1 (1), 41-53.
- Glaser, R. (1984), "Education and Thinking," *American Psychologist*, 39, 93-104.
- Hindle, Kevin (2004) "Choosing Qualitative Methods for Entrepreneurial Cognition Research: A Canonical Development Approach," Forthcoming in *Entrepreneurship Theory & Practice*.
- Hisrich, Robert.D. (1989), "Marketing and Entrepreneurship Research Interface," in In G. Hills, R.W. LaForge, and BJ Parker (Eds). *Research at the Marketing/Entrepreneurship Interface*, University of Illinois, Chicago, IL.
- _____. (1992), "The Need For Marketing In Entrepreneurship," *The Journal of Consumer Marketing*, 9 (3), 43-47

- Houston, Franklin S, and Jule B. Gassenheimer (1987). "Marketing and Exchange," *Journal of Marketing*, 51 (4), 3-10.
- Hunt Shelby D. (2002), *Foundations of Marketing Theory: Towards a General Theory of Marketing*. Armonk, New York: M.E. Sharpe.
- Ibrahaim, A. B., and K. Soufani (2002), "Entrepreneurship Education and Training in Canada: A Critical Assessment," *Education and Training*, 44(8/9), 421-430.
- Lurigio, A. J., and J.S. Carroll (1985), "Probation Officers' Schemata of Offenders: Content, Development, and Impact on Treatment Decisions," *Journal of Personality and Social Psychology*, 48, 1112-1126.
- McClelland, D. C (1968), "Characteristics of Successful Entrepreneurs," Paper presented at the Proceedings of the Third Creativity, Innovation, and Entrepreneurship Symposium, Framingham, MA.
- McKeithen, K. B., J.S. Reitman, H.H. Reuter, and S.C. Hirtle, (1981), "Knowledge Organization and Skill Differences in Computer Programmers," *Cognitive Psychology*, 13, 307-325.
- Mitchell, Ronald. K. (1994), *The Composition, Classification, and Creation of New Venture Formation Expertise*. Unpublished Dissertation, University of Utah, Salt Lake City, UT.
- _____ (2001), *Transaction Cognition Theory and High Performance Economic Results. (First ed.)*. Victoria, BC: International Centre for Venture Expertise: www.ronaldmitchell.org/publications.htm.

- _____ (2003), "A Transaction Cognition Theory of Global Entrepreneurship," JAI Series on Entrepreneurship Cognition.
- _____, and S.A. Chesteen (1995), "Enhancing Entrepreneurial Expertise: Experiential Pedagogy and the Entrepreneurial Expert Script," *Simulation & Gaming*, 26(3), 288-306.
- _____, J.Brock. Smith, Kristy.W. Seawright, and Eric A. Morse, (2000), "Cross-Cultural Cognitions and the Venture Creation Decision," *Academy of Management Journal*, 43(5), 974-993.
- _____, J. Brock Smith, Eric A. Morse, Kristy W. Seawright, Ana-Maria Peredo, and Brian McKenzie (2002), "Are Entrepreneurial Cognitions Universal? Assessing Entrepreneurial Cognitions Across Cultures," *Entrepreneurship Theory & Practice*, 26(4 (Summer)), 9-32.
- _____ Lowel Busenitz, Teresa Lant, Patricia P. McDougall, Eric. A., Morse, J. Brock Smith (2004), "The Distinctive and Inclusive Domain of Entrepreneurial Cognition Research," *Entrepreneurship Theory & Practice*, 29(2), 5-16.
- Muzyka, Daniel.F. and Gerald.E. Hills (1993), "Introduction," in G.E. Hills, R.W. LaForge, and D.F. Muzyka (Eds.), *Research at the Marketing Entrepreneurship Interface*, The University of Illinois at Chicago.
- Natarajan, Rajan and Richard P Bagozzi (1999), "The year 2000: Looking back," *Psychology & Marketing*. 16 (8), 631-642.
- Neisser, U. (1967), *Cognitive Psychology*. New York: Appleton-Century-Crafts.

- Sarasvathy, S., N. Dew, S.R. Velamuri, and S. Venkataraman (2003). "Three Views of Entrepreneurial Opportunity. In Z.J. Acs and D.B Audretsch (eds.) Handbook of Entrepreneurship Research. Kluwer Academic Publishers.
- Schumpeter, J. (1934), *The Theory of Economic Development*. Boston, MA: Harvard University Press.
- Shane, Scott., and S. Venkataraman (2000), "The Promise of Entrepreneurship as a Field of Research," *Academy of Management Review*, 25(1), 217-226.
- Shaw, E. and D. Carson (1995), 'The Emergence of Entrepreneurial Marketing: A New Paradigm?', *Proceedings, Marketing Education Group Conference*, University of Bradford, 713-723,
- Slater, Stanley. 1997. "Developing a Customer Value-Based Theory of the Firm," *Journal of the Academy of Marketing Science*. 25 (2): 162-167.
- _____, and John C. Narver (1995), "Market orientation and the learning organization," *Journal of Marketing*. Vol.59 (3), 63-74.
- Smith, Craig A., Kelly N. Haynes, Richard S. Lazarus, and Lois K Pope (1993), " In Search of the "Hot" Cognitions: Attributions, Appraisals, and Their Relation to Emotion," *Journal of Personality and Social Psychology*, 65 (5) November 1993, 916-929.
- Smith, J. Brock and Ron K. Mitchell (2004), Towards Demarcation of the Marketing-Entrepreneurship Interface: The Marketing Implications of Transaction Cognition Theory, Working Paper Series, University of Victoria.

- Venkataraman, S. (1997), "The Distinctive Domain of Entrepreneurship Research," In J. Katz (Ed.), *Advances in Entrepreneurship, Firm Emergence and Growth*, 3, 119-138.
- Vesper, K. H. (1996). *New Venture Experience*. Seattle: Vector Books.
- Williamson, O. E. (1975), *Markets and Hierarchies*. New York: The Free Press.
- _____ (1991), "Strategizing, Economizing, and Economic Organization," *Strategic Management Journal*, 12(S), 75-94.
- Woodruff, Robert (1997) "Customer Value: The Next Source for Competitive Advantage," *Journal of the Academy of Marketing Science*, 25 (2): 139-153.
- Zahra, Shaker and Gregory G Dess.(2001), "Entrepreneurship as a field of research: Encouraging dialogue and debate," *The Academy of Management Review*. 26(1), 8-10
- Zeithaml, Valarie A., Leonard L. Berry, and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (April), 31-46.