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Entrepreneurial Contexts and Traits of Entrepreneurs

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This paper adopts a neo-Darwinian perspective that the entrepreneurial process includes distinctive features that "select" individuals with certain characteristics for participation and success. These individuals are attracted to entrepreneurial situations and their compatible traits enable them to navigate the challenges of entrepreneurial contexts. Furthermore, entrepreneurial environments may reinforce these traits in entrepreneurs, which develop over time in response to the requirements of entrepreneurial activity (Littunen, 2000).

The paper begins with a description of early-stage entrepreneurial contexts, considers individual traits that accommodate those contexts, and concludes with a metaphor of entrepreneurs as jazz musicians that captures similarities in context and behavior.

The Entrepreneurial Context

Entrepreneurship is the recognition, evaluation and pursuit of opportunity in diverse contexts (Christensen, Madsen & Peterson 1989). It is expressed in observable behavior such as founding an organization (profit or non-profit) or leading a project within an organization to pursue an opportunity.

Entrepreneurship is situational and varies among nations and regions, over time, and among individuals (Reynolds et al, 2001). Environmental factors are key in fostering entrepreneurship and include culture, networks, access to capital, mobility, and government policies.

Although the entrepreneurial setting differs from corporate and bureaucratic contexts, entrepreneurial behavior may occur in small or large organizations (intrapreneurship). Entrepreneurial ventures transit stages of startup, growth, and harvest . The distinctive quality of the early-stage entrepreneurial experience arises from its focus on opportunity, uncertainty and lack of structure, resource scarcity, and fluid or dynamic quality.

TABLE ONE

THE ENTREPRENEURIAL CONTEXT
Opportunity-orientation
Unstructured, Uncertain
Resource Scarcity
Fluid, Dynamic, Turbulent

Opportunity-orientation

Entrepreneurs pursue opportunities, whether attracted to them by their compelling quality or pushed by economic and personal necessity.

An opportunity is a configuration of the (business) environment that supports the creation of a (profitable) new enterprise. Opportunities arise (and disappear) at recurrent junctures in the external environment. The morphology of entrepreneurial opportunities identifies markets, needs and technologies as primary junctures, like fault-lines in a physical landscape.

Opportunities arise from external changes in industry entry barriers, emergence of new markets (e.g. the Hispanic market), identification of underserved markets (waiting lines, bottlenecks), new needs that arise from secular changes in the economy (e.g. outsourcing), or technologies that provide the ability to serve existing needs more efficiently.

In some cases, proactive entrepreneurs may "create" new opportunities through purposive action to restructure the social understanding of an industry (e.g. specialty coffee and microbreweries) (Rindova & Fombrun, 2001). In exceptional cases, the driven entrepreneur may single-mindedly raze barriers to entry and change the course of history, as Bill McGowan (MCI) did in his successful campaign against AT&T's monopoly in the telecommunications sector.

Uncertainty

Entrepreneurial situations are inherently unstructured and uncertain. The absence of information imbues them with risk but also defines an opportunity. The ambiguity or uncertainty associated with decision outcomes is a primary source of perceived risk in decision making situations (Sitkin and Pablo, 1992).

Stable markets are not particularly attractive to entrepreneurs with an orientation to growth ("lifestyle" entrepreneurs may welcome them). In stable markets, entrenched players consolidate their hold and erect barriers to entry. Customers establish routine expectations of product or service quality and delivery. Successful differentiation in such situations requires significant investment that is beyond the resources of most startups.

In entrepreneurial situations, by contrast, the opportunity itself is not a “sure thing” and this inaugural uncertainty is compounded by the vagaries of implementation. The absence of structure creates a need to establish a new organization where jobs are undefined, customers and suppliers are new, and there are constant surprises in the external environment. These uncertainties, however, provide a margin for unusual profitability.

Resource Scarcity

The defining characteristic of entrepreneurship is the creation of an organization to pursue an opportunity. New organizations require resources and entrepreneurs are typically strapped when they start their ventures. VC or “angel”-backed enterprises may start flush, but they represent a small subset (1-3%) of new ventures. Most entrepreneurial startups begin with few funds, no intellectual property, no reputation, no customers, and new suppliers. Eighty-one percent of Inc 500 founders relied on personal savings, friends and family, bank loans and mortgages, and credit cards (Bhide, 38). Fifty percent of the 2001 Inc.500 CEOs launched their companies with $20,000 or less. Not surprisingly, the biggest cause of new venture failure is under-capitalization.

Fluidity

New ventures face fluid and changing circumstances. Especially for novice entrepreneurs, each day is filled with new and surprising challenges. Turbulent markets are inherently attractive to entrepreneurs because of the margin they allow for inventiveness, daring, and commitment. But even in less turbulent circumstances, entrepreneurs cope with continual change.

Traits of Entrepreneurs

Entrepreneurial situations like those described above attract individuals who possess attributes that are adapted to their challenges. People who possess these attributes are comfortable with, and have the qualities to succeed in, entrepreneurial situations. These attributes are commonly referred to as “traits,” “personality” or “mindset.” They consist of values, beliefs, attitudes, and behaviors that are functional within entrepreneurial contexts. Individually, non-entrepreneurs may possess many of these traits. The entrepreneurial profile comprises a cluster of traits that are mutually supportive.

TABLE TWO

THE ENTREPRENEURIAL EXPERIENCE	TRAITS OF ENTREPRENEURS
Opportunity focused	Inquisitiveness, opportunity-recognition Action-orientation (pro-active) Need for achievement
Unstructured, uncertain	Tolerance of ambiguity, uncertainty Independence, self-starting, internal locus of control, individualism Risk propensity Creativity, innovative
Scarce resources	Networking, coalition building Teamwork, hero-making Belief in personal efficacy Niche-craft Persistence, determination
Dynamic, turbulent, fluid	Improvisation Empirical, pragmatic experimental, Muddle through

Opportunity-related Attributes

Inquisitiveness and Opportunity Recognition

A focus on opportunity builds on a sense of optimism. More often than not, entrepreneurs view the glass as half full, building on their sense of personal efficacy. Opportunity-recognition involves an inquisitive turn of mind. Entrepreneurs demonstrate alertness (Kirzner 1973 and Busenitz 1996) and scan the environment for gaps in the market and unmet consumer needs (Joachim & Wilcox, 2000). While personal experience in an industry can provide a strong basis for insights into emerging opportunities, however, it is not essential. Bhide reported that 40 percent of Inc500 CEOs had no prior experience in the industry in which they launched their ventures (Bhide, 2000), confirming earlier findings by Case (Case, 1989).

Nor is the identification of entrepreneurial opportunities a highly researched process. Amar Bhide reports that 71 percent of his sample of Inc 500 founders simply replicated or modified ideas encountered through previous employment, and another 20 percent discovered their idea serendipitously (Bhide 1994). Only 4% engaged in a systematic search for opportunities.

While all entrepreneurs pursue opportunities, they vary in the extent of their "opportunism." At one end of the spectrum, an "opportunistic" entrepreneur pursues serial business opportunities, exemplified by the following example.

> *"...James Marcelleti...purchased a few hundred acres of grape vineyards in Western Michigan, the "fruit basket" of the state. Realizing that he could accomplish more than peddling grapes to greengrocers, he began selling his crop to grape juice producers. Over time, he developed his own wine and with two friends founded a small winery that he eventually sold for a profit. Then he recognized that the local farmers lacked a reliable source of baskets and crates for distributing their fruit, so he founded a basket factory and manufactured his own baskets to ship his crop, also selling them to other farmers. The region's economy began to boom, so he purchased more land, which was developed into subdivisions and modern homes. But because he was an opportunist, he was keenly attuned to market gaps, using his farm as a foundation to start other companies." (Joachim & Wilcox, 2000)*

At the opposite end of the spectrum, the "visionary" entrepreneur fixates on the unwavering pursuit of a single, powerful opportunity. In practice, this fixation may represent a "false opportunity" that is ahead of its time or fails to consider significant obstacles to implementation.

By mindset (alertness) and personal experience, then, entrepreneurs are attuned to the recognition of opportunities, have the skills to evaluate them, and the motivation and skills to pursue them in an organized way. In entrepreneurship as in investing, opportunities with the greatest potential for gain arise in uncertain situations.

Action-orientation (pro-active)

Entrepreneurs are not "sicklied o'er by the pale cast of thought." The pursuit of opportunity is not a contemplative endeavor or one that demands extensive research or planning before deciding a course of action. Proactive personalities "scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change"(Bateman and Crant 1993).

Entrepreneurs actively scan the environment for opportunities, recognize that the window may not remain open long, and engage in entrepreneurial behavior to pursue them (Becherer & Maurer, 1999). Bolstered by a sense of personal efficacy and perception of opportunity, entrepreneurs exhibit decisiveness and rapid reaction time. A majority (63%) of Inc. 500 founders interviewed by Bhide reported only weeks to a few months between idea and startup (Bhide, 55). Sixty percent of the 2001 Inc. 500 CEOs started their ventures with no formal written business plan (Inc. 500, 2002).

The action-orientation of entrepreneurs accommodates their limited resources, the niche markets they pursue, and the uncertainties they face. If the principal alternatives to action are either inaction or extensive advance planning and research, the latter are excluded by cost and the low probability of conclusive results. In such circumstances, the most effective research may be to "just do it."

Need for achievement

Entrepreneurs manifest a need for achievement (in contrast with affiliation or power) that drives the pursuit of opportunity and the creation of tangible, measurable targets and outcomes (McClelland, 1961 & 1965) within the context of the creation of a new organization. Money is not typically the goal, but provides the proverbial scorecard.

Uncertainty-related Attributes

Tolerance for ambiguity

Entrepreneurs demonstrate an ability to accommodate the inherent uncertainties of entrepreneurial situations. They do not require full information, clarity or closure at each step of the way. Ambiguity itself provides an opportunity to introduce novel and creative responses that define new rules of the game. This ability to deal with ambiguity reduces the perception of risk that might otherwise impede action in uncertain environments. As reported elsewhere, entrepreneurs are sufficiently comfortable with uncertainty that they embark on ventures with little research or planning.

Creativity

Uncertain situations require creativity to impose order and provide solutions. Entrepreneurs must be inventive to create solutions to problems and challenges. Working without a large supportive organization, entrepreneurs have few standard operating routines or stock responses to novel situations. As described below, one of their key attributes is improvisation. It is notable, however, that most promising start-ups do not involve a unique or revolutionary idea. Bhide reports that only 6 percent of Inc 500 founders claimed to have begun with a unique product or service, and 88 percent reported their success was due to "exceptional execution of an ordinary idea" (Bhide 2000). In most cases, they imitated or modified an idea encountered through previous employment.

Independence, self-starting, internal locus of control

One of the most salient qualities of entrepreneurs is the desire for independence and autonomy, to be the boss, not to work for someone else. They do not require external structure, controls, or instructions to do their job. An internal locus of control bridles at external direction and ascribes outcomes to one's own behavior (Rotter, 1966), reinforcing a sense of personal efficacy.

Risk propensity

Entrepreneurs are commonly described as risk-takers. There is a distinction between objective risk and the perception of risk (Palich & Bagby, 1995). Risk implies the possibility of loss due to uncertain future events. The magnitude of risk depends both on the stakes and on the degree of uncertainty. The perception of risk depends on the "framing" of both stakes and uncertainty. The stakes for entrepreneurs include independence, achievement, and innovation. Their framing of uncertainty emphasizes opportunity, which leads to a comfort with ambiguity. Their belief in personal efficacy mitigates the perception of risk and sustains pro-activity.

The objective risks normally perceived in entrepreneurial situations relate to stakes in finance, social relations, career, psychology, and health (Bird, 1989). Entrepreneurs mortgage their homes, stretch credit card limits, and borrow from friends and family while risking their reputations in uncertain new ventures. Contrary to popular perception, however, the absolute magnitude of these risks is not always high (Bhide, 2000). Entrepreneurs, moreover, play a game where the stakes include independence, achievement and motivation. The risks they are conventionally thought to bear regarding finances and careers, therefore, are offset not only by their actual low level of personal investment but by the high esteem they place on other values.

Nevertheless, entrepreneurs do not simply plunge ahead mindless of the realities of risk. Although their risk perception may be lowered due to their comfort with uncertainty and sense of personal efficacy, they also adopt measures that reduce and syndicate risks among other parties (Bhide, 2000).

Scarcity-related Attributes

Networking, coalition building

Bootstrapped entrepreneurial ventures need friends and allies to compensate for their limited resources. Successful entrepreneurs cultivate the art of networking and coalition-building to augment their own scarce resources (Low and MacMillan, 1988; Sweeney, 1987; Birley, 1985; Johannisson, 1985; Das and Teng, 1997; Johannisson, 1998; Szarka, 1990). Free advice, referrals, and inside information offset the intrinsic lack of organizational resources. In effect, the network *becomes* the entrepreneur's organization. The existence of effective networks within regions is a major element supporting entrepreneurship (National Commission 2000).

Teamwork, hero-making

The energy and talent of the team is one of the few resources an entrepreneur can draw upon. Skills in team building and recognition of individual and team performance maximize the performance of team members.

Belief in personal efficacy

Entrepreneurs believe they can make a difference and influence their environment. They are convinced that success or failure lies in their hands and not in the resources at their disposition, the potency of their organization, luck, or other external forces beyond their control. This belief in personal efficacy underlies a self-confidence that reduces the perception of risk (Miller and Toulouse, 1986) and reinforces their action-orientation (pro-activity) (Becherer and Maurer, 1999). It also may help explain their cavalier attitude towards research and planning.

Nichecraft

Entrepreneurs frequently economize by focusing on niches that dominant firms leave untouched because of their limited profit potential. Narrow markets do not require the large capital investments required for broad markets and suit the limited resources of entrepreneurs. They also allow entrepreneurs to sidestep frontal competition with entrenched rivals. Consequently, entrepreneurs often focus on local markets, customers with specialized needs, or new and emerging markets that are too uncertain for large competitors (Bhide 2000).

Persistence, determination

The challenges of entrepreneurship require dogged persistence and determination. “It can’t be done” is a phrase entrepreneurs commonly encounter. Scarce resources, novel ideas, unexpected bumps in the road are all part of the entrepreneurial process and require persistence in the face of obstacles.

Fluidity-related Attributes

Improvisation

Entrepreneurs face the continual need to improvise in response to challenges in an ever-changing environment. They do not engage in extensive research or detailed planning. As Bhide reports, they cannot afford to do so with limited resources, the modest likely profit of most ventures does not merit it, and the high uncertainty limits its value (Bhide 2000). Sixty percent of Inc. 500 founders started their businesses with no formal written business plan (Inc.500, 2002). Once launched, entrepreneurs are tactically flexible in adjusting to external changes. Only 16% of 2001 Inc500 CEOs remained in the same business and the same target market as when they launched the venture (Inc. 500, 2002).

Empiricism, pragmatism, experimentation

Entrepreneurs eschew dogmatism in favor of a pragmatic, empirical approach that experiments to see what works. This requires flexibility in the face of continual uncertainty with respect to outcomes and incipient challenges.

Muddling through

Entrepreneurs do not insist on the rational model of “one best solution.” In “satisficing” mode, they adopt successive approximations to solve immediate problems.

The Entrepreneur as Jazz Musician

The metaphor of jazz musician seems particularly apt in capturing the characteristics of entrepreneurs. Timmons (1999) makes passing reference to such a metaphor but does not elaborate. Barrett (1998, 2000) develops the metaphor but applies it to organizational learning.

Jazz incorporates many features that resemble entrepreneurial situations. Unlike an orchestra following a scripted musical score under the leadership of a single individual, or a studio recording *post facto* with multiple edits, jazz musicians improvise spontaneously in real time. The Latin word “improvisus” means “not seen ahead of time.” Jazz builds on minimal structure that allows maximum flexibility and adaptation.

Jazz musicians “live in a chaotic, turbulent environment; highly interdependent on one another to interpret equivocal information; dedicated to innovation…” They “hang out” in jam sessions that are informal educational sessions to learn the tricks of the trade.

Jazz requires action and initiative. Passivity is not an option. Musicians climb out on a limb and push the edge of uncertainty. They follow where the music leads, sometimes stumbling, but learning from errors to create new musical opportunities.

Building on stock phrases and set routines, the essence of jazz is taking risks to explore novel, creative paths, inventing responses without a pre-scripted plan. A jazz musician builds music from objects at hand, like Claude Levi-Strauss’ concept of “bricolage,” the art of using found objects. In jazz, these objects are chords, rhythmic patterns, phrases and motives just played which the musician appropriates in a pattern of “retrospective sense making.”

Loosely structured, jazz musicians feed off each other and the audience, mutually supportive but sparking energy and creativity in alternation between support (“comping”) and solo performance.

Jazz is a minimalist, “resource poor” environment where solo performance stands on its own. Mistakes are hard to conceal but are often disguised and incorporated as the basis for new musical directions.

TABLE THREE

Jazz Musicians*	**Entrepreneurs**
Novelty, newness, emergence, "aesthetic of surprise," avoid routines	Innovation, opportunity orientation
Dynamic	Turbulence
Unscripted, spontaneous, chaotic, uncertain, unpredictable	Tolerance for ambiguity, uncertainty Improvisation
Improvisation, extemporaneous, flexible	Muddle through, adaptation
Exploratory, experimental	Improvisation, experimentation
Turn errors into musical opportunities, Retrospective sense-making	Experimentation
Fast, irreversible decisions, passivity not an option	Action orientation
Independence, personal freedom, solo	Being one's own boss, internal locus of control
Minimal structure, few resources, "bricolage"	Resource scarcity, networking, making do
Hanging out, informal learning, mutual support, "jam" sessions	Networking
Embrace risk, exploring the edge of competence, letting go the familiar, provocative learning relationships, potential for failure	Risk acceptance
Dynamic synchronization, attunement, interdependence, responsiveness, dialogue and exchange, taking turns	Teambuilding, customer orientation

**Descriptions based on Barrett (1998, 2000)*

Conclusion

The purpose of this paper is to identify the traits of entrepreneurs through a literature review. In examining these traits, it became apparent that certain beliefs, attitudes and behaviors are functional within the context of the entrepreneurial process. This suggests a Darwinian lens for viewing the relationship between process and personality. It also appears that the traits form a cluster in which, for example, a focus on opportunity arises from the ability to deal with uncertainty, and a sense of personal efficacy leads to an attenuated perception of risk and a pro-active disposition. Finally, the metaphor of jazz musician captures many of the same qualities that have been observed and studied in entrepreneurs.

As often happens, the paper raises as many questions as it answers. These provide an ample agenda for additional research and clarification. They include the following questions. What is the interactive nature of the relationship between traits and process? Which traits are most salient at different stages of the ongoing entrepreneurial process? Is a different cluster of traits functional during the growth phase compared with the startup phase? Do "opportunistic" entrepreneurs manifest different traits than "visionary" entrepreneurs? Is there any correlation with success rates? What is the dynamic quality of the "cluster" concept—how do the traits relate to one another? A final question fits the specific context of this conference: do the reported traits of entrepreneurs align with traits of engineers and engineering students, and what are the implications for entrepreneurship education?

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