

#### IDEA OR PRIME OPPORTUNITY?

# A FRAMEWORK FOR EVALUATING BUSINESS IDEAS FOR NEW AND SMALL VENTURES

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# **ABSTRACT**

Entrepreneurs and entrepreneurship educators recognize that only a small percentage of venture ideas actually represent viable business opportunities. This paper addresses the important issue of opportunity recognition using a framework designed with a mnemonic structure for easy recall and based on the extant literature on opportunity recognition. The framework prompts users to examine Product/service, Resource, Individual, Market, and Economic start-up issues. Thus, the PRIME analysis is a heuristic designed for initial opportunity evaluation of a business concept prior to preparing a full-blown business plan. We discuss and apply this framework, demonstrating its effectiveness in the classroom and in practice.

# INTRODUCTION

Entrepreneurship scholars, practitioners, and educators define the field in terms of opportunity focus (Brodsky, 2000; Bygrave, 1989; Gartner, 1985; Kamm & Nurick, 1993; McGrath & Hoover, 2001; Stevenson & Gumpert, 1985; Timmons & Spinelli, 2004; Weinzimmer, Fry & Nystrom, 1996). For scholars and practitioners, an important question regarding opportunity recognition and evaluation is how do potential entrepreneurs, small business owners, or informal investors determine if an idea is a good business opportunity. This is particularly important given the often high uncertainty, low information, and rapid decision making

surrounding start-up ideas. In addition, entrepreneurship educators look for efficient and effective tools for teaching students opportunity recognition and evaluation skills.

In the formal venture community, sources of funding such as venture capital firms, banks, and more recently, angel investor groups have access to sophisticated, often proprietary, investment analysis tools and models. They often receive thoroughly researched, even professionally prepared, business plans upon which these groups apply their analytic tools. These more formal sources of financing represent a relatively small percentage of new and small business funding, unless the business opportunity meets stringent growth or asset requirements. The more common sources of funds for new and smaller businesses, such as family, friends, informal investors, and the entrepreneurs themselves (Shulman, 2004), often do not have access to the same level of analytic tools as formal investors and may not receive thoroughly prepared business plans early on in their discussions regarding a start-up concept. Consequently, these more typical funding sources for new and small business ideas can benefit from access to systematic and easy-to-use approaches for determining initial feasibility of a business idea, short of investing the time in the full-blown business planning process. In addition, students of entrepreneurship can benefit from new pedagogical tools that allow them to easily practice opportunity evaluation and critical thinking regarding new venture concepts.

Scholars suggest that "simplifying heuristics may have a great deal of utility in enabling entrepreneurs to make decisions that exploit brief windows of opportunity" (e.g., Ucbasaran, Westhead, & Wright, 2001, pg. 59). This article describes such a simplifying heuristic designed to be a framework to examine important Product/service, Resource, Individual, Market, and Economic characteristics when initially investigating a start-up concept. This framework, using the acronym PRIME, prompts users to ask key questions regarding a venture or growth concept's merits.

In the following section we describe selected leading models for business concept assessment, illustrating how our framework builds on these models. We then explain our model for evaluating business opportunities, how it fits key criteria for such a framework, and following the format of Weinzimmer et al. (1996), we describe applications of the model.

#### **EXISTING TOOLS FOR EVALUATING BUSINESS OPPORTUNITIES**

While not comprehensive, our discussion of the selected models in this section provides a wide range of topics identified by entrepreneurship scholars and practitioners as important for evaluating business ideas. The Timmons Model of the Entrepreneurial Process (Timmons & Spinelli, 2004) continues to be a leading framework for evaluating business opportunities. It focuses attention on the fit among three elements critical for evaluating a start-up: the team, the resources, and the characteristics of the opportunity. Potential entrepreneurs and investors can use this model to determine if, like a three-legged stool (Timmons, 1999), the business opportunity has achieved a critical balance among the three elements. Timmons further outlines a Venture Opportunity Profile, which details multiple key topic areas and specific benchmarks and yardsticks for evaluating business opportunities such as Industry and Market, Economics, and Personal Criteria. The Timmons frameworks are designed to allow investors to evaluate a business idea against high potential and low potential venture criteria, with a goal of helping investors identify high potential opportunities while screening out low potential ones.

With two other frameworks, the New Venture Decision Making Model and the Opportunity Search Model (Kamm & Nurick, 1993; Weinzimmer et al., 1996, respectively), the entrepreneur or business owner takes center stage. The New Venture Decision Making Model emphasizes idea generation and business concept evaluation as important first steps in new or

small venture decision making, including topics such as social networks and resource supplies available to the founding team. With the Opportunity Search Model, the start-up entrepreneurs or small business owners are influenced by three sets of factors in their search for opportunities: environmental attributes, owner characteristics, and strategy factors.

Finally, some entrepreneurs perform an analysis of the Strengths, Weaknesses, Opportunities, and Threats, or SWOT analysis, for a firm, its industry, and its environment (e.g., Bernrolder, 2002). However, in practice SWOT is more often applied to existing ventures, as it implicitly assumes an existing business looking for ways to identify new strategies (Warnaby, 1999).

We designed the PRIME framework as an extension to and integration of these and other models, specifically to help address the needs of the substantial and growing number of new and serial entrepreneurs, informal investors, students of entrepreneurship, as well as formal investors who favor an additional opportunity-screening model to recommend or use. As recent studies indicate, the environment for start-up businesses consists of heightened awareness and increasing documentation of entrepreneurial activities, increasing speed with which venture opportunities are often evaluated, growth in types and numbers of entrepreneurship education programs, and a continuing likelihood that informal funding sources such as families, friends, and the entrepreneurs, themselves, will be primary sources of start-up funding (Penley, 2000; Reynolds, 2000; Reynolds, Bygrave, Autio, Cox & Hay, 2002). Thus, the PRIME analysis was designed to help entrepreneurs, investors, and students of entrepreneurship screen and evaluate venture opportunities. Further, our goal was to structure the PRIME analysis as an easily remembered heuristic guiding opportunity search and evaluation in the typical entrepreneurial contexts of high uncertainty and low information. Figure 1 shows the overall PRIME analysis framework.

Product/Service Resources Individual Superiority Defined Skills Uniqueness Accessible **Traits** Protection Minimized Aspirations Ethicality Sustainable Advantage Relevant Experience Readiness Synergies **Business Model Evaluation of Opportunities** Markets **Economics**  Size Forgiving Targeted Rewarding Reachability **Enduring** Other Stability Choices Harvest Options Need/Want

Figure I – PRIME Analysis Framework

#### DEVELOPMENT OF THE PRIME ANALYSIS FRAMEWORK

We identified four key criteria for application-oriented models to help guide our development of an efficient opportunity evaluation framework, building on previous work in this area (e.g., Gorry, 1971; Timmons & Spinelli, 2004; Weinzimmer et al., 1996). The four criteria we identified stipulate that the framework be easy to recall, educative and prompting, comprehensive, and useful in helping identify personal relevance. We briefly discuss these four criteria and the importance of each.

## Easy to Recall

An important characteristic of any framework is the ease with which users can remember and apply it when evaluating a potential business opportunity. As Figure 1 illustrates, PRIME integrates key opportunity evaluation factors from prior models, using a mnemonic device to remind the user of key questions, similar to the purpose of SWOT analysis. Thus, the PRIME framework was not intended to identify new characteristics for evaluating business opportunities, but was designed to help easily recall established business evaluation criteria when out in practice or in the classroom. We adopted this easy to recall design based on recent scholarly and practitioner findings that mnemonic frameworks were positively associated with user recall in training and marketing (Nestor, 2000; Smith & Phillips, 2001). Consistent with concerns in the literature related to memory aides (Campos, Gonzalez, & Amor, 2003; Hill & Westbrook, 1997; Panagiotou, 2003; Ullius, 1997), the acronym PRIME did not drive our inclusion of particular content characteristics. Rather, all of the framework's characteristics were first drawn from well-established opportunity recognition and evaluation models and literature, from which we then developed relevant acronyms.

#### **Educative**

Similar to the content in a full-blown business plan, our framework educates users regarding key information they need to obtain about the opportunity and prompts them to uncover issues that might not have been considered without the model. For instance, in Figure 1, the topic Resources, with subtopics of Defined, Accessible, Minimized, and Sustainable Advantage, reminds the user to explore whether key resources such as suppliers, advisors, and customers are defined or accessible (e.g., does the founding team have relevant industry networks?). Thus, while new venture economic forecasts are understandably uncertain, identifying whether key resources have been approached or assembled by the team can be more certain-either the team has contracts, contacts or not--and reminding the PRIME user to ascertain this level of resource definition and accessibility can help users understand the overall timing and readiness, for instance, for a particular opportunity.

# Comprehensive

Ultimately, a model for evaluating opportunities must help the user ask questions covering a full range of issues well documented as important for opportunity recognition. To be comprehensive, yet parsimonious, we identified major opportunity evaluation criteria discussed in leading entrepreneurship literature for practitioners, (e.g., Abrams, 2003), educators (e.g., Kuratko and Hodgetts, 2003; Timmons & Spinelli, 2004) and scholars (Shane, 1997). For instance, as Figure 1 under Economics illustrates, the PRIME framework uses the mnemonic FRESH to prompt users to examine a wide range of economic issues including Forgiving, Rewarding, Enduring, Stability, and Harvest characteristics. Will the venture

suffer a fatal blow if an early mistake is made due to high fixed costs early on? Is this a short or long window of economic opportunity? While not a complete set of all economic factors to evaluate, this set covers a wide range of relevant and important business opportunity characteristics discussed in the literature.

# **Helps Identify Personal Relevance**

By incorporating an individual rating system, the framework helps users identify important individual assumptions or personal relevance regarding PRIME topics (e.g., Product/service), subtopics (e.g., Superiority, Uniqueness, etc.), and the business concept as a whole. That is, new venture success criteria may not have equal weighting for different entrepreneurs or investors, and particular aspects of business concepts may be more or less attractive to individuals or teams. The PRIME framework, incorporated into a worksheet provided to users, outlines a rating system of simple plus-zero-minuses that allows users to consciously consider the relevance or importance of each topic and subtopic for themselves (see Table Thus, one user might rate the subtopic Availability of resources as a zero (0), representing a "me too" aspect of the opportunity, neither positive nor negative, while another individual might rate resource Availability for the same idea as a double-minus ( -- ), indicating this is a fatal flaw for the opportunity as far as this particular individual assumes. The PRIME analysis ratings also include double-plus (++), indicating the user perceives that the topic or subtopic represents a major competitive advantage that could be validated and emphasized in a business plan, a single-minus ( - ), suggesting potential areas to eliminate or minimize through reworking the original concept during the business planning process, and a single-plus ( + ), indicating a positive characteristic but not a major advantage over competitors.

The PRIME analysis worksheet also prompts users to provide an overall rating for each major topic (e.g., Product/service) and the business concept as a whole and to write/type in key facts known or needed to continue opportunity evaluation. Thus, the PRIME analysis allows for an individually weighted examination of venture concept characteristics, including highlighting characteristics to be emphasized, minimized, or further investigated. For instance, answers to PRIME questions on the Rewards of the business concept (under Economics) might be overshadowed by answers to the Ethicality questions (under Product/service) when examining the "payday lender" industry and its attractive gross margin opportunity, which for some would not be compelling enough to overcome potential ethical or legal issues (ClassActionAmerica.com, 2004). The following section describes topic areas of the PRIME framework and selected literature on which each topic and subtopic was based.

# Table IV - Selected Topic and its Subtopics in a Prime Analysis Worksheet a

Review the following Product/Service, Resources, Individual, Market, and Economic topics and subtopics, write/type in the second column facts known or needed to determine initial feasibility, and write/type in the third column your subjective ratings for topics and subtopics (see rating descriptions in note below table).

Sub-topic	Facts known or needed	Rating <sup>b</sup>
*		++ + 0
Superiority		
Business model		
Overall	product/service rating =	
Overall l	ousiness concept rating =	

<sup>&</sup>lt;sup>a</sup> Complete PRIME analysis worksheet in Microsoft Word format is available from first author.

## COMPONENTS OF PRIME ANALYSIS

The following descriptions illustrate relevant questions PRIME prompts users to ask within key topic and subtopic areas and highlights selected literature supporting the use of these questions. Table IV illustrates one topic and selected subtopics on a PRIME analysis worksheet used to guide users through the opportunity evaluation thought process.

### **Product/Service Evaluation**

Understanding the entrepreneur's product or service idea continues to be at the heart of the opportunity recognition process (Abrams, 2003; Scholhammer & Kuriloff, 1979; Vesper, 1990). The mnemonic for Product/Service Evaluation is SUPERB (see Figure 1).

<u>Superiority</u>. Is the product or service idea demonstrably superior in some way to competing products or services, as of the current information? Can the superiority be quantified on a dimension meaningful to potential customers? Informal and formal investors use a number of screening criteria for evaluating the sustainable competitive advantage of an idea, including characteristics such as superiority, uniqueness, and protection (see below) of the product or service (Roberts, Stevenson, & Morse, 2000; Zider, 1998).

<u>Uniqueness</u>. Scholars and practitioners often list uniqueness as a key characteristic for a new business concept. Importantly, uniqueness can encompass a wide range of product, service, process, and systems applications (Bhide, 1996; Kuratko & Hodgetts, 2003). Moderately

Rate each topic in terms of whether it adds to, detracts from or is neutral regarding the concept's business potential. Is the topic (e.g., Product/service) or subtopic (e.g., Superiority) a major competitive advantage that could become the backbone concept for a business plan; if so, rate as a double-plus (++). Is it a highly positive characteristic, but not one that provides a major advantage over competitors; if so, rate as a plus (+). Is the topic or subtopic a "me too" characteristic with respect to competitors with no apparent problems or advantages; if so, rate as a zero (0). Is it a weakness to be minimized or eliminated through reshaping the concept; if so, rate as a minus (-). Is the topic or subtopic a potential deal killer or an overwhelming problem or disadvantage; if so, rate as a double-minus (--).

high levels of uniqueness may be most desirable. Extremely unique concepts often require massive public education, an expensive undertaking for a start up, and can tend to result in huge success or rapid failure, with failure relatively common. However, concepts without some uniqueness rarely create significant competitive advantages.

<u>Protection</u>. To what extent can the product or service concept be protected from competitors who may possess better financing and market-place connections and strong motivations to copy a good idea quickly? Having or creating barriers to entry such as patents, licensing agreements, specialized knowledge, or secret formulas is not only important to strategic management scholars (e.g., Fahey & Randall, 2000; Thompson & Strickland, 2003), but is also of interest to entrepreneurship scholars and practitioners (Bhide, 1994; Fry, Stoner, & Weinzimmer, 1999).

Ethicality. Does the product or service make a positive social contribution in the eyes of the entrepreneur or investor for a particular niche market, or are there ethical or even legal considerations regarding the founders' actions in the opportunity (e.g., employment contract issues)? Organization and entrepreneurship scholars suggest that ethicality plays an active role in organizational decision-making (Grant, 1992; Dees & Starr, 1992; Paine, 1994). Indeed, leading entrepreneurship textbooks include entire chapters devoted to topics such as "Personal Ethics and the Entrepreneur" (e.g., Timmons & Spinelli, 2004, p. 327).

<u>Readiness.</u> How long before the new venture will likely have its first customer, generate revenues, or become profitable? Does a business plan exist yet, or is the idea still in the mind of the entrepreneur? Kourilsky and Carlson (2000) discuss the relevance of entrepreneurship readiness in curriculum development, maintaining that students need to be ready to start a business. Timmons and Spinelli's (2004) concept of timing in evaluating opportunities also encompasses the aspect of product or service readiness for the market.

<u>Business model</u>. How does the overall product or service offering look to the PRIME user? For instance, what are the ongoing revenue generation and customer attraction processes as compared with other business models in the industry? Is this explicit or can it be easily implied? While business models have received increased attention in recent years, the issue of what an idea might look like in the real world has long been of interest to those evaluating new venture opportunities (Vesper, 1990; Wiltbank & Sarasvathy, 2002).

#### Resource Evaluation

The mnemonic for Resource Evaluation is DAMS (see Figure 1). Key resources for new venture opportunities include financial, social, human, physical, technological, and organizational (Ucbasaran et al., 2001). Resource acquisition has been a pivotal issue in evaluating opportunities for well over a decade. For instance, Vesper's New Venture Checklist (1990) asked entrepreneurs to evaluate new ventures in terms of key resources such as financing, staffing, suppliers, and equipment. Practitioner-oriented books on preparing business plans include extensive worksheets to help identify key resource requirements when evaluating new ventures (e.g., Abrams, 2003). And, scholars have identified resources as an important component for creating organizational and new venture sustainable competitive advantage (Alvarez & Busenitz, 2001; Barney, 1991).

<u>Defined.</u> Vesper's New Venture Checklist (1990) suggests that the evaluation of start-ups should include questions regarding who will have to be hired and when, and how will they be found and recruited. We refer to these types of questions as defining the resources for the new venture. Indeed, in addition to labor, questions should also include to what extent the

small business owner or entrepreneur knows exactly what and how much is needed in other key resource areas such as suppliers, funding, and equipment.

Accessible. Does it appear that the founding entrepreneurs have not only defined the resources required, but also have access to them, such as solid relationships with important suppliers or funders, are there backup sources of supply identified, favorable trade terms available? Vesper's New Venture Checklist (1990) asks these questions, in addition to Kamm and Nurick (1993), who discuss "resource supply decisions" (p. 20) in new venture formation, and Timmons and Spinelli (2004), who identify access to resources as a part of the entrepreneurial process.

<u>Minimized</u>. On the one hand, has a real effort been made to eliminate the "nice, but not necessary" expenditures, and on the other hand, have resources been minimized to a point that suggests unrealistic expectations or that might be harmful to the success of a particular opportunity? Concerns over the need to minimize or bootstrap start-up resources is a common issue in the entrepreneurship literature (Bhide, 1992), incorporating tools and models for bootstrapping (e.g., Smith & Smith, 2004) and case studies that illustrate how successful entrepreneurs initially bootstrapped their new enterprises (e.g., Hofman, 1997).

<u>Sustainable advantage</u>. Do the resources defined and accessible by the entrepreneur appear to help build sustainable advantage for the new venture, or do they allow an initial advantage that may be lost early on to competitors? Barney (1991), Alvarez and Busenitz (2001), and others argue that organizations, in general, and entrepreneurs, in particular, must develop a sustainable competitive advantage through resources that are rare or of value to the market or competitors, are difficult to imitate, or have little to no substitutes in the market.

## **Evaluation of the Individual Entrepreneurs**

The acronym for Individual Evaluation is STARS (see Figure 1). This section focuses on the entrepreneur or founding team, leaving the evaluation of key employees as part of the resource evaluation. Human capital resources (Becker, 1964) in organizations and new ventures have been of interest to scholars for decades. Studies suggest that while "person variables" (Shaver & Scott, 1991, p.25) are not totally predictive of entrepreneurial success, there are key personal characteristics that continue to be of interest to scholars and practitioners when evaluating new venture opportunities (McCline, Bhat, & Baj, 2000; Robinson, Stimpson, Huefner, & Hunt, 1991; Timmons & Spinelli, 2004; Weinzimmer et al., 1996).

<u>Skills</u>. While not comprehensive, the following illustrate a range of skills often attributed to new venture success by scholars and practitioners (Basadur, 2001; Bhide, 1994; Grant, 1992; Pickle, 1964; Zider, 1998): a) business skills including functional, technical, and persuasion/motivation skills, b) interpersonal skills, including communication, listening, conflict management and networking, and c) creative problem solving and change management skills.

<u>Traits/attributes</u>. The literature identifying entrepreneurial traits or attributes, while not conclusive, suggests that successful entrepreneurs typically exhibit certain types of traits, including achievement and opportunity orientation (Hornaday & Aboud, 1971), a strong sense of personal responsibility and control (Durand & Shea, 1974), tolerance for risk (Bhide, 1996) and ambiguity (McMullen & Shepherd, 2001; Weinzimmer et al., 1996), persistence (Shaver & Scott, 1991), proactiveness and innovativeness (Covin & Slevin, 1986; Miller, 1983), and resiliency, energy, and good health (Adebowale, 1992; Boyd & Gumpert, 1983). For

instance, some people find the idea of entrepreneurship or starting one's own business appealing until they discover the personal investment, sacrifices, and other commitments necessary for success.

<u>Aspirations</u>. Does the founding team communicate vision and passion for the idea? What have they done to show commitment to the success of the concept? Kamm and Nurick (1993) and Ronstadt and Shuman (1988) refer to this as the alignment of the founding team's interests with the start-up's mission. Roberts, Stevenson and Morse (2000), Sahlman (1997), and others describe commitment to the venture as a key personal attribute for new venture success.

<u>Relevant experience</u>. For a start-up opportunity, three kinds of experience are often examined: previous entrepreneurial/leadership, industry, and educational experience (Hall & Hofer, 1993; MacMillan, Siegel, & Narasimha, 1985; Roberts et al., 2000). Ideally, the entrepreneur or team will possess all three types of experience, since that increases the probability of success. Experience in the industry, or knowledge and experience with the technology used to produce or provide the product or service, has been commonly associated with success and often builds important credibility early on.

Synergy. Does the founding team have complementary skills that offset each member's weaknesses, and does there appear to be a clear understanding of team member roles? If an individual proposes the concept, does he or she show enough understanding to identify key roles or skills needed for a balanced founding team? This dimension incorporates our knowledge of criteria for successful founding teams used by informal and formal sources of funding for new ventures (Hall & Hofer, 1993; Kamm & Nurick, 1993; MacMillan et al., 1985) and our knowledge of high performing teams (Katzenbach & Smith, 1993; Slevin & Covin, 1992).

# **Market Evaluation**

The mnemonic for Market Evaluation is STRONG (see Figure 1). This segment of the PRIME focuses the user's attention on fundamental issues for new business concepts, market, and marketing (Lodish, Morgan, & Kallianpur, 2001).

<u>Size and structure</u>. Market size and structure are consistently of interest to scholars in evaluating new venture or growth opportunities (Roberts et al., 2000; Timmons, Smollen, & Dingee, 1977; Zider, 1998). Large, mature markets dominated by a few companies may be difficult for start-ups to penetrate, unless the entrepreneur can focus on a clearly defined market niche; smaller markets may be more approachable, but may have limitations in overall potential.

<u>Targeted customers</u>. Does the entrepreneur know specific customer demographics, psychographics, buying decisions, and other key market segment characteristics (Hills & LaForge, 1992; Vesper, 1990)? When evaluating whether someone has a good venture opportunity, scholars suggest asking the entrepreneur to name specific customers or relevant market research data that can illustrate whether the idea is far enough along to start determining actual potential (Bygrave & Zacharakis, 2004).

<u>Reachability</u>. Does the founding team know how it will reach targeted customers (Sahlman, 1997; Vesper, 1990)? Can the team use niche marketing techniques to reach the primary markets, or will it have to use potentially more expensive mass marketing approaches?

Targeted or niche marketing can be much more desirable for smaller companies and start-ups (Abrams, 2003; Hills & LaForge, 1992).

Other choices (the competition). What does the founding team appear to understand about its direct and indirect competition? Can the team communicate specific strengths and weaknesses competitors possess in the marketplace and the nature of the competition's current and anticipated strategies (Porter, 1980; Sahlman, 1997; Schollhammer & Kuriloff, 1979)? The assessment of other choices should also include consideration of firms operating in different niches or markets that might move into the proposed market if it appears highly lucrative. In recent years distinctions among suppliers, distributors, customers and competitors have blurred so a firm in any of these groups could move into the firm's market (Davis & Meyer, 1998).

<u>Needs</u>. Is the market need or want clearly identified and understandable (Baty, 1974; Hills & LaForge, 1992)? Is the product or service a compelling purchase to the market (Longenecker, Moore, & Petty, 2003; Sahlman, 1997)? For typically resource-slim small or new ventures, identifying a product or service already perceived as a need may help avoid expensive and/or time-consuming learning curves.

Growth prospects. How much growth is occurring in the relevant market and industry (Roberts et al., 2000; Zider, 1998)? What major market and industry changes might impact the venture idea's marketplace (Kunkel & Hofer, 1993; Weinzimmer et al., 1996), and could the proposed new company be ahead of the change curve? Entrepreneurs entering a market experiencing rapid growth should recognize these market opportunities, even as they anticipate challenges such as larger firms entering the market. On the other hand, entering a slowing or maturing market can present serious growth problems unless the entrepreneur successfully identifies and appeals to an untapped market niche.

### **Economic Evaluation**

The mnemonic for Economic Evaluation is FRESH. This analysis directs the user's attention to the potential outcomes associated with the new venture (Human & Matthews, 2004; Ucbasaran et al., 2001). Since the PRIME is designed to prompt users for information they need to obtain as well as information they already have, the economic analysis used with the framework can range from sophisticated financial forecasting (Smith & Smith, 2004) to (more likely) back-of-the-envelope analyses to arrive at approximations for early decision making on whether to pursue the concept at all (e.g., Hesseldahl, 2004).

Forgiving. Can a few early mistakes be made without killing the business? Positive indicators include a high gross margin and a high ratio of variable to fixed costs (Longenecker et al., 2003; Sahlman, 1984). Unique technology opportunities can be less forgiving due to the market's learning curve, often requiring heavy and lengthy investment in marketing and education long before revenues occur, and capital intensive ideas (e.g., manufacturing) may also be less forgiving opportunities, unless the founding team has industry experience to help mitigate risks.

<u>Rewarding</u>. Can the PRIME user perform back-of-the-envelope analysis or ROI estimates to obtain an early determination of economic potential? What information is needed for further economic analysis, and what is the upside potential of the idea given the risks estimated (Roberts et al., 2000; Sahlman, 1997)? How would forecasted economic rewards for this

venture compare to industry benchmarks or yardsticks (Chandler & Hanks, 1993; Smith & Smith, 2004)?

Enduring. Will the window of opportunity likely remain open for some time, or does the opportunity depend on a temporary market trend that must be exploited quickly (Ucbasaran et al., 2001; Vesper 1990)? An opportunity with a longer time frame or larger window may offer advantages for a new venture, as it allows the entrepreneur more time to make necessary adjustments when gearing up operations. Pursuing a short-term trend (e.g., a fad) can also be an opportunity as long as the team can obtain sufficient resources and develop a clear strategy for moving in quickly, capitalizing on demand, and then exiting without getting left with expensive equipment, investments in inventory, or other resources.

<u>Stability</u>. How cyclical, seasonal, or uncertain is the financial pattern, and would the business generate sufficient financial resources to keep cash flow positive for a year or two if profits do not materialize (Vesper, 1990; Zacharakis, 2004)? These types of instabilities in the economics of the idea can create serious cash flow problems, particularly if the Individual segment of the PRIME indicates little industry experience for handling relevant cash flow cycles.

<u>Harvest options</u>. What are the likely exit or harvest options for the small business owner, founding entrepreneur/team, and investors, such as strategic sale, merger, or taking the company public (Birley & Westhead, 1993; Petty, 2004; Ronstadt, 1986)? Is the business idea considered a potential "cash cow" to fund other ventures (Timmons & Spinelli, 2004) or a family business that could be passed down to successive generations? While the exact mode of harvest or exit cannot often be guaranteed, this long term look at the venture concept allows potential investors, scholars, practitioners, and students to explore the long-term thinking of the founding team.

#### APPLYING THE PRIME ANALYSIS TO EVALUATE OPPORTUNITIES

To illustrate the application of the PRIME framework for evaluating venture ideas early in the process, in this section we include data and application examples. First are survey data collected from two of our MBA courses on New Venture Creation, both of which focused on opportunity recognition and evaluation using the PRIME analysis and the business plan. Over 95 percent of the MBA students work full-time while pursuing their degree, and most have 3-plus years of work experience upon entering our applied MBA program. Thirty-seven (77%) of the 48 MBAs in the two New Venture creation classes surveyed were male. Assignments in both courses required students to use the business plan and the PRIME frameworks to evaluate new venture ideas, with all students completing one business plan on a new venture idea, four case analyses evaluating business plans, and four PRIME analyses evaluating new venture ideas.

The survey was administered to the students at the completion of the assignments, asking questions about the use of the two frameworks, the PRIME and the business plan, for evaluating business concepts. When asked, "If you were presented with a start-up business idea to evaluate, to what extent do you see benefit in using *both* the PRIME analysis and the business plan to evaluate the concept (i.e., are the two frameworks different enough to use both?)." On a five point scale from 1 = to no extent to 5 = great extent, respondents' mean rating was 3.9. Respondents were also asked an open-ended question regarding, "If both frameworks (the business plan and the PRIME analysis) were to be used to evaluate a start-up concept, how would you suggest using both frameworks for opportunity evaluation and why do you say this? For instance, would you use one before the other, or both simultaneously, or

would you use them for different specific purposes?" Thirty-eight of the 48 (78%) indicated they would likely use the PRIME analysis before the business plan for reasons including: "The PRIME analysis is good as a first pass evaluation of a business idea. The business plan would follow up as a detailed look at the business opportunity." "The PRIME would be first, to evaluate initial feasibility. The business plan would be to prove the case," "I would use the PRIME first to have a general idea of the business, and the business plan to get more in depth analysis if the general idea panned out," and "PRIME seems good for first blush analysis and evaluation. Gives a good full picture overview of an opportunity. The business plan gives more detail to see whether an idea really holds together and whether or not it is well thought through."

It is worth noting that *none* of the MBAs responded that the business plan should be completed *before* the PRIME analysis, and several suggested that the two frameworks be used in unison due to prompting for complementary issues (e.g., ethicality, readiness). In addition, when asked, "How useful was PRIME as a classroom tool for learning the process of opportunity recognition and evaluation?", the mean response was 4.2 (on a 5 point scale, where 5 = extremely useful). Finally, when asked, "How useful are the mnemonics (i.e., spelling out words for each set of major headings and subheadings) of the PRIME analysis in evaluating venture ideas?", respondents' mean rating was 4.0 Consequently, the survey evidence from one application context, the MBA entrepreneurship classroom, helps validate our intended use for the PRIME analysis as an early stage, easy-to-use, comprehensive screening tool that helps prompt users to ask key questions regarding a new venture concept.

A second approach for illustrating the usefulness of the PRIME analysis is to briefly describe actual applications, one using PRIME as a teaching tool in entrepreneurship education, and one using the framework as a tool for professional consultants. Below are brief applications in these two contexts, highlighting processes, outcomes, interpretations, and conclusions.

# USING THE PRIME AS A TEACHING TOOL IN ENTREPRENEURSHIP EDUCATION

#### **Process**

The instructor assigns a start-up business case to be read and analyzed by students using the PRIME analysis worksheet provided to the class as a Microsoft Word document into which they can type their comments, ratings, etc. (see Table IV). The assignment includes students reading the case, which describes an actual start-up idea by two brand managers at an international consumer products company who learn that their employer wants to sell, within 90 days, one of its brands that does not meet the company's new strategic directions. The brand has slipped from an \$80MM brand to a \$6MM one in less than two years, since the company no longer markets the brand. Students must review each PRIME topic and subtopic for its relevance to the case, and come to class with a completed PRIME analysis worksheet in which they have written short bullets of facts known and/or needed for each subtopic with a rating (plus, minus, etc.) for each topic and subtopic in terms of what it adds or detracts from the feasibility of the idea. Finally, students must be prepared to discuss, "Given your PRIME analysis, would you invest in this start-up idea; why or why not?"

Before the class in which the case analysis will be discussed, the instructor writes six column headings across the classroom board, one for each of the five PRIME topic headings (e.g., Product/services, Resources, etc.), and one for "Facts Needed" (See Table IV). Directly below each of the five PRIME topic headings on the board, the instructor writes the relevant

subheadings (e.g., below the Product/Service heading are rows for the subtopic headings Superiority, Uniqueness, etc. with space to the right of each). The instructor's class discussion is guided by students' comments and ratings that are written on the board next to the appropriate subtopics or under the Facts Needed column.

#### Outcomes

By the end of the class discussion, a full set of student comments, ratings, and facts needed have been posted on the board for all to consider. For instance, in a recent class discussion on the case described above, some students argued for a double plus (strong competitive advantage) for the Protection of this Product/service idea (e.g., trademarked brand), for the Sustainable Competitive Advantage of the Resources (e.g., valuable brand equity that could be recovered in the market), and for Skills and Synergies of the Individuals (e.g., two managers with direct brand and industry experience and complementary business skills). On the other hand, some students viewed the company's "pulling the plug" on the brand's marketing as a fatal flaw or double-minus for the Reachability in the Market section (e.g., without the large corporation's supply chain the consumer product brand would never get to supermarket shelves), they viewed the 90-day timing as a double-minus for Readiness in the Product/service section, and they viewed the Relevant Experience of the Individuals and Accessibility of Resources as single minuses or characteristics that needed re-working or improving, if a plan were developed, since the two managers had no entrepreneurial experience and while well-connected in their corporate and industry community, were not at all connected in the entrepreneurial community. Also, Other Choices in the Market segment were rated zero (neither positive nor negative), since the brand, while still having some revenues, was also considered to have "a dated image" with respect to competition.

#### Interpretation

As a class, how do we interpret our PRIME analysis after a case discussion? A classroom board of facts known, facts needed, and student ratings allows the instructor to engage the students in a final discussion on the challenges in collecting and assessing accurate information on start-up ideas and on the potential subjectivity and therefore differences of opinion in rating new venture characteristics. The classroom discussion also allows students to hear others' perspectives on what is perceived as positive or negative in a start-up concept, which often helps clarify or even change an individual student's own perspective. For instance, in this case, after a detailed class discussion on how "the pulled marketing-plug" could be overcome through some innovative strategic partnerships within the consumer products supply chain, the double-minus rating was changed to a single-minus, meaning the issue could be reworked through further attention in a business plan. Thus, given the double-plusses described above and the potentially restorable revenues of the brand, the venture concept was rated overall as a good potential for a business plan and for investors.

#### **Conclusions**

The final conclusion for the PRIME analysis class discussion is that a) if no fatal flaws (double-minuses) continue to be identified after discussion and fact finding, and b) at least one compelling major competitive advantage (double-plus) is identified, then a business plan with fully articulated financial analysis can be worth pursuing.

# USING THE PRIME AS A TOOL FOR PROFESSIONAL CONSULTANTS

One of the co-authors frequently consults with small businesses and start-up entrepreneurs on

their new business ideas. Indeed, the original development of the PRIME framework was to meet this co-author's needs for a systematic and straightforward way to walk a potential new business owner through the thought processes of evaluating a business opportunity. allowed the co-author a means of not missing anything fundamental in the early analysis process with his clients. The process, outcomes, interpretation, and conclusions of the PRIME analysis when used in this context are similar to those described in the teaching tool application above, except not done in the classroom with a reading assignment. Instead, the consultant provides the PRIME analysis worksheet to the start-up entrepreneur so that an actual business concept can be analyzed before discussing it in detail with the consultant. Or, the consultant and start-up entrepreneur can walk through the PRIME framework together, making notes on facts needed, ratings of the PRIME characteristics, and overall interpretations regarding whether the idea is worth further pursuing in a business plan. Indeed, instead of a classroom board full of comments, ratings, and facts needed, the entrepreneur can talk with his or her family, friends, consultants or business advisors to outline the same issues done in the classroom setting. A special case of the consulting application would incorporate the PRIME framework as a tool for approaching a venture capitalist requiring fully articulated financial analyses and forecasts. An initial estimate of firm valuation would likely follow from the PRIME analysis, which can be a useful tool for the entrepreneur prior to contacting venture capitalists.

#### CONCLUSIONS AND IMPLICATIONS

The PRIME analysis framework builds upon the entrepreneurship and strategy literature and has benefited from use by successful entrepreneurs, small business owners, investors, and students of entrepreneurship. Of course, the framework is not without its limitations, including not being inclusive of all venture opportunity evaluation criteria, not offering brand new criteria for evaluating opportunities, and using a mnemonic structure that, while shown to increase recall of important topics in practice, can raise concerns regarding structure driving content in the framework. We have attempted to minimize these limitations by emphasizing the purpose of the framework as an easy-to-recall tool using well-adopted criteria in the literature and incorporating user suggestions and survey benchmarking into the design of the framework.

One of the major implications of the PRIME analysis involves allowing potential users to perform an initial reality check on a business idea prior to or as they develop a business plan. As some entrepreneurs resist developing a formal business plan, the PRIME analysis offers them a comprehensive, quick way of ensuring that the business plan "in their heads" includes consideration of major issues and problems facing the new venture.

A second implication of the PRIME analysis is that once the PRIME is initially completed, users can review their subjective ratings and conclusions to identify areas for which they need more information, areas in which the concept needs to be modified, and key characteristics that can become the cornerstone of a business plan. A third implication for small business owners, entrepreneurs, and consultants is that the ratings of each subcategory can be used as a validity check across potential or practicing team members who complete and then compare their individual PRIME analyses.

Entrepreneurship educators can use the PRIME analysis as a framework for teaching students how to evaluate business ideas and a tool in class for evaluating business case assignments. PRIME has proven to be useful for introducing a comprehensive range of issues from the literature of which students should be aware when evaluating entrepreneurial ideas.

Finally, the PRIME analysis' integration of key topic areas from the literature on new venture evaluation provides implications for scholars. For instance, the use of a simple subjective rating system provides an opportunity for scholars to examine how the backgrounds, attributes, and skills of entrepreneurs and professionals working with entrepreneurs may affect individual ratings, which can further scholars' understanding of related issues, such as tolerance for risk and ambiguity and differing perceptions of risk and rewards in start-ups.

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