Evaluating Agricultural Value-Adding Business Opportunities for Equity Participation

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Introduction

The emerging opportunities for producers may be grouped into two broad groups: food opportunities and non-food opportunities. Food opportunities are emerging from the growing number of consumers seeking healthful, wholesome and tasty food products that simultaneously address their perceived environmental concerns with traditional food production approaches and technologies. These consumers are paying premiums on organic food products because they meet their food safety and environmental concerns. There are also consumers who are paying premiums for ethically produced food products as well as fair trade initiatives. While many argue that there are no differences in taste and safety between traditional and organic food products, the important driver lies not in the facts but in the reality of consumer willingness to pay for what they perceive as value. The rebellion against the traditional food system has created the now mainstream natural and organic products market and many of the specialty food products currently being marketed. Additionally, convenience has become an increasingly important opportunity for those who want to enter that market. Convenience opportunities include packaged ready-to-eat or ready-to-cook meals, service-oriented in-home chef offerings and specialty dining environments.

Increasing consumer concerns about air quality and pollution as well as environmental issues such as global warming are leading to changes in policy that are supporting non-food opportunities for producers. A couple of the fastest growing initiatives in this area are ethanol and bio-based energy production. Currently, there are more than seventy-five ethanol plants in the United States with a capacity of nearly three billion gallons per year. Although most of these plants are owned by producers and their cooperatives, Decatur, IL-based Archer Daniels Midland Company, the $23 billion

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agricultural ingredients supplier controls about 40 percent of total ethanol volume produced.

Other non-food opportunities are in the area of health and pharmaceuticals as well as industrial uses of agricultural products (Table 1). Dixon Ticonderoga Company, based in Heathrow, FL, for example, is currently producing crayons with soybean oil instead of the traditional petroleum wax. Soybean oil reduces waxy flakes and provides brighter smoother colors. Similarly, Cortec Corporation of White Bear Lake, MN, has replaced mineral oils with soy methyl esters in its Ecoline products for lubricating machinery. As consumers' appetite for renewable resources increase, interest in agriculture's ability to meet the demand for inputs into the production of these products is expected to increase. The economic competitiveness of these renewable products is expected to increase as they are shown to be technically competitive against established non-renewable products. As agriculture's role expands beyond food and extends into industrial supply and health, it elevates itself from being a supplier of low-value products to become a sector that the economy depends on for its physical, mechanical and other needs.

Table 1: Examples of Current and Emerging Opportunities in the Agri-Food Sector

Industrial	Health	Food	Energy
Adsorbents	Nutraceuticals	Identity preservation	Biodiesel
Adhesives	Cosmetics	Ready-to-eat (cook)	Anaerobic conversion
Dust control agents	Therapeutics	Specialty food products	Ethanol
Lubricants & waxes	Diagnostics	Organic & whole foods	Solid fuels
Packaging material	Essential oils	Ethnic food ingredients	
Composite products	Sugars & sweeteners	Healthy snacks	
Coatings	Enzymes	Food ingredients	
Fertilizers		Animal welfare	
De-icers		Appelation d'origine	
Enzymes			
Adjuvants			
Solvents			
Detergents			

An increasing number of producers are invited to participate in value-adding initiatives that often promise them not only significant return on investment but higher prices for their products which become raw materials for these initiatives. These value-adding invitations often encompass producers making both financial and production commitment to the venture. Since many of these producers have traditionally focused on

their farming and ranching business, the decisions about participating in these ventures are often outside their knowledge domain.

The purpose of this paper is to provide producers with a process (and a tool) to help them make investment decisions about value-adding opportunities that come their way. It provides an objective approach to evaluate business opportunities and compare different businesses from an investor's perspective. The paper also provides a process for potential investors to identify questions about the business for which they have received no answers from the business proponents. But most importantly, this document provides a framework for checking if all questions one has about a potential investment vehicle have been answered. By conscientiously applying the tool presented in this document to the value-adding business investment decision, it is hoped that producer-investors minimize their own investment regret while contributing to the development of businesses with higher probabilities of success. The driving philosophy of this document is that every investment must be assessed for its ability to meet the investor's objectives. However, since investment in a value-adding business opportunity also transforms the marketing plans of the producer-investor, it is more important that it meets a higher level of scrutiny to minimize its adverse impact and enhance its positive outcomes.

The rest of the document is divided into two parts. The first part provides an explanation of business evaluation and discusses why they are important. The second part presents AgbizSMART Evaluator®, an evaluation tool that may be used to assess the investment attractiveness of particular business ventures. The AgbizSMART Evaluator® is based on the assumption that producers' investment dollars and production commitment must be put into investment vehicles that provide not only the highest potential return on investment, but has the highest probability of success. In other words, the AgbizSMART Evaluator® is a tool focused on helping producer-investors sound investment decisions by focusing on the critical value aspects of the business opportunity confronting them.

Why Business Evaluation

Most producers interested in value-adding initiatives have two principal objectives: (1) increase the net price they get for their products; and/or (2) benefit from the growth that the value-adding business generates. While some people may make some of these investments for social reasons, the fact remains that every investment requires some form of acceptable return to make it justifiable.

The increase in net price received from producers' products may come in the form of dividends or patronage fees the company pays after using these products as inputs in its production process and achieving a certain level of return over and above the associated costs of processing and marketing. Achieving the dual objective of increasing income and increasing wealth requires foregoing some scarce current resources – time, energy and money. Since each of these resources has alternative uses that must be forgone if they are going to be dedicated to an investment, the potential investor needs to make sure that the income and wealth generated over a particular time frame by the business exceeds those that could be generated by the foregone alternatives. This is the rationale behind conducting business evaluation – making sure that resources are being put into a business that will provide the best net price increase and growth over time.

Formally, we define business evaluation as the process of determining the significance and worth of a business through careful appraisal and study. Its objective is to provide a clear rationale for investing in a particular business vis-à-vis all other competing investment opportunities. Business evaluation allows potential investors to conduct their own due diligence on the business instead of depending on the analysis of others. It allows them to ensure that the promised outcomes are in line with their personal financial expectations and other investment objectives. It is important to note that while business evaluation does not eliminate investment risks, it positions investors to minimize regret if the investment does not turn out as expected.

The usefulness of business evaluation increases as the investment and its switching cost increase. For example, because they have relatively low switching costs (i.e., someone who would purchase the investment from the current investor), many people do not thoroughly evaluate publicly traded companies before purchasing their stock. On the other hand, since most early stage value-adding businesses have high

switching costs (i.e., there is no ready market the equity or debt positions in these companies), it is critical that potential investors spend the time and effort to conduct a more in-depth assessment of the business' significance and worth.

* * *

The Context

Fred B. is sitting at the kitchen table drinking coffee when his neighbor and friend, Spark A., walked in. He is holding a copy of the AVAV Inc.'s business plan. Fred had finished reading it a few days ago and had been mulling over its contents. "I've read this thing a few times, Fred, and I'm excited about it. Can we evaluate this business together so we can assess if it's the goldmine we've been waiting for? Spark asked.

Both Fred and Spark are successful producers and very efficiency-conscious. They have been increasing their land base and their net income over the past decade even as many of their neighbors took off-farm jobs to subsidize the farm. The two friends constantly trade ideas and will often get together to discuss how to further improve their farm businesses. Spark's argument has remained unchanged for years: remaining in the commodity business will not change producers' financial well-being. Although Fred agreed with him, they have yet to find an initiative that will provide them with an escape from producing and selling commodities. The "Goldmine Project," as they call it, has been ongoing for more than five years, with a simple objective of identifying an innovative business model that can provide them with sustainable net income enhancement and equity growth opportunities. Because of their passion for their current agricultural businesses, they have limited their search to value-adding initiatives that will leverage the efficiencies they have built over the years.

"These AVAC people want to employ this technology from the University to substantially transform grains and oilseeds into a product that will replace an input that is currently being used in the cosmetic industry. You know how they say ethanol adds 30 cents to the bushel, these guys are projecting adding at least 70 cents to the bushel" Fred explained.

"Careful now . . . we need to understand the whole business and evaluate it dispassionately so we can assure ourselves that this the Goldmine Project. You know how many people have come through this town selling us dreams," Spark cautioned.

The business plan has placed the AVAV's value at $2.7 million and the proponents were committing 30 percent of that value and were looking to raise the remaining 70 percent from no more than 50 producers. The producer-investors were required to contribute a cash investment of $1.89 million in addition to committing a total of 25,000 acres grain and oilseed production to the company. The business plan noted that cash investment will be tied directly to acreage committed, i.e., a producer-investor cannot invest more cash than the equivalent required acreage and vice-versa.

"What this means is an average of 500 acres per producer and $37,800 in cash," Fred indicated. "You got $37,800 to put in this?"

"I keep telling you not to focus completely on the money. What's important is the return on the investment. The business evaluation will help us decide if this provides a better return on investment compared to what we are currently getting or can get elsewhere. If we find out it provides a better return than what we know, then we look for the money to invest. If not, we learned something."

"Yeah, we will learn how not to throw our hard earned money away," agreed Fred. And they set out to work on the evaluation of the AVAV business plan.

* * *

AgBizSMART Evaluator®: A Business Evaluation Approach

AgBizSMART Evaluator® is a simple tool that helps agricultural producers to evaluate potential investment opportunities objectively. It allows potential investors to discuss their expectations about a particular business by addressing their subjective assumptions about specific indicators of success and comparing them with assumptions presented in the business plan and those of other potential investors. AgBizSMART Evaluator® helps investors to identify unanswered or unsatisfactorily answered questions. It allows producer-investors to undertake a comprehensive due diligence of the business to assure themselves that they are making the right decision, and because it forces them to think about how current decisions contribute to achieving financial and other objectives,

it creates an opportunity for them to demand the appropriate information to help them make their investment decisions. AgBizSMART Evaluator® also allows investors to compare and rank alternative businesses to facilitate the selection of the best overall business opportunity to invest in.

The AgBizSMART Evaluator® focuses on six principal categories: (1) Management; (2) product/service; (3) market and industry; (4) finance and economics; (5) competitiveness; and (6) personal fit. Each of the categories is weighted to reflect its potential contribution to the business' success. Within each category are specific weighted indicators which reflect their importance in the category.

Management Category

The management category draws investors' attention to the people who are responsible for implementing the business plan. An effective management team is characterized by an in-depth knowledge of the industry and a good sectoral knowledge. It also has an extensive and deep network connection with industry players at different levels of authority. This allows the management team members to appreciate the industry's nuances and intricacies as well as the relationships among the major players. They are respected by their peers in other companies and are able to extract support from them when needed. Research suggests that excellent managers with little or no industry network connections do not perform as well as those with extensive and deep network connections. In a rapidly changing and highly competitive marketplace, extensive networks are critical for efficiently navigating the marketplace and enhancing the firm's ability to seize and maintain profitable market share.

Management should also be recognized by the industry as people with irreproachable integrity. Research indicates that managers with high integrity tend to also have deep and credible industry networks. Therefore, integrity reinforces network connections which support management's ability to perform. Potential investors need to find out from people who have dealt with the company's management team members to ensure they have integrity and are trustworthy. "This seems like hard work," Fred noted. "It seems I have to go out and actually find out about these people before I make a

decision to participate in this business." Spark looked sternly at him and asked, "How hard did you work to put $37,800 in the bank?"

Product/Service Category

The product/service category focuses attention on the product or service that the business is proposing to sell. It must present a valuable point of differentiation to cause a switch in customers' preferences. Valuable points of differentiation may include a lower price or some measurable higher value from the customer's perspective. For example, if the product/service is more expensive but is not compensated with a higher value, customers are unlikely to switch from their current suppliers. On the other hand, even if it has a higher price but offers a compensating enhancement in the overall value, then some value-conscious customers will switch. This was the case with organic products: they had higher price but were viewed by consumers as presenting a higher value, and therefore presented a credible switching threshold.

To successfully assess the product's value/price relation, it is important to have a clear idea about its target customers. Understanding their demographics,psychographics or other characteristics can help one evaluate the value/price relationship. In the case of ethanol, for example, understanding the increasing pressure on oil refineries to eliminate MTBE from gasoline and the environmental benefits of ethanol can provide some indications of the product's ability to cause a switch in preferences as well as the extent of the switch. This assessment also offers investors an opportunity to evaluate the company's pricing assumptions when reviewing its finance and economics indicators. Sometimes, it is necessary for investors to extend their understanding of the value/price relation to their customers' customers since demand for inputs are derived from final product demand. Although this does not imply knowing these customers, it ensures that potential investors have a good idea about the assumptions underlying the company's growth projections as well as its view on its product's distinguishing factors.

The strength of niche orientation seeks to determine the strength of the product's points of differentiation and their sustainability in the face of competitors. In the case of organic products, the fact that producers required three years of non-pesticide use and other organic practices to gain organic status implied a strong niche orientation. The

growing influence of the environmental movement and the increasing number of medium to high income consumers supporting the movement implied a strong sustainability for organic products. These factors supported the formation of organic products as an industry and their emergence at a category in many traditional grocery stores. The same is true for ready-to-cook and ready-to-eat meals, which are emerging in response to the growing time constraints confronting consumers.

Assessing the strength of niche orientation helps potential investors think about the marketplace reception and sustainability of the proposed products/services. A strong niche orientation implies an identified customer segment with an identified need that the products or services address. The more immediate customer benefits are, the faster the adoption rate and the higher the sustainability level. We saw this with the adoption rates of bioengineered crops that had improved agronomic qualities, such as bt-corn and Roundup®-Ready soybean. On the other hand, the lack of immediate/direct benefits from the same products is causing skepticism in some consumer markets.

If you cannot reach your customers, you do not have a market. Thus, access to market is *the* critical success factor for any new product or service. Regardless of the strength of the product's niche orientation, the absence of strong distribution channels access will impede success. The literature suggests that even when the product is not highly differentiated in its form or service, access to strong distribution channels can provide significant support for success.

Market and Industry

The main objective of the market and industry assessment is to determine if there is enough demand to justify the business' existence (credible market size) and to evaluate assumptions underlying the company's expectations about the structure and behavior of the major industry incumbents. For example, the share of total market controlled by the top companies in the industry provides an indication of the structure and conduct expectations. A highly concentrated industry (i.e., few companies control a large market share) will be a more difficult market to enter, but it is also one in which new entrants are likely make the most gains most quickly. What investors are looking for in this

assessment is how uniqueness allows the company to carve a market space for itself to avoid direct competition from entrenched incumbents.

Avoiding direct competition with entrenched incumbents is a major asset for a new company. The easier and longer a new product can go unnoticed by incumbent companies, the better it is for the new company. By avoiding the attention of incumbent companies, the new product can establish a toehold in the market without directly scarce resources to address incumbent reactions. Andrew Grove, former CEO of Intel Corporation, points out in his book, *Only the Paranoid Survives*, how Intel continued to treat emerging companies in the computer chip as "segment zero" because these companies avoided a direct assault on Intel. By the time Intel felt the competitive pressure of these new chip manufacturers, they had established themselves in particular market segments. In the case of Whole Foods Markets, because it focused on organic products, a product category not recognized by many of the major grocery retailers for more than a decade, it had the free space to grow profitably without having to endure price wars and other competitive reactions. Wal-Mart Stores, Inc. used the same strategy to grow into the world's biggest corporation. Wal-Mart avoided detection from the leading retailers of the time by presenting a discount store model and locating its stores in small towns and away from shopping centers.

Access to inputs is critical for effective production efficiency in agricultural value-adding businesses. Two principal dimensions of access are important in the case of agricultural inputs: (1) physical access to ensure operational efficiency; and (2) geographic distribution of access to minimize production risks. The agricultural value-adding business plan should discuss this and provide strategies to address both. In assessing these strategies, producer-investors should balance the increased cost of inputs against the enhanced efficiency emanating from the risk reduction strategies.

Support from established players in the supply chain minimizes the entry difficulties experienced by new entrants into any market. One of the major supporters for a new agricultural value-adding business is product distributors who provide access to markets through their well-established networks. Therefore, the company's market analysis should indicate to the players in the supply chain who would benefit from its relationship and how they can help it reach its target market quickly and efficiently. For

example, securing a supply contract from a major retailer can provide a major boost to success for a new company. Similarly, being able to secure the commitment of major user of one's products prior to production could make the difference between success and failure. For an investor, the credibility of these suppliers can build confidence in the business proposition and provide a participation incentive. However, these relationships must be judged on their sustainability and effectiveness. For example, Future Beef Operations, a value-adding beef processing company established in Arkansas City, Kansas, had Safeway identified as a committed customer in its business plan. Unfortunately, its value proposition was counter to Safeway's business model – i.e., the company was proposing to sell high quality case-ready beef products while Safeway traditionally rewarded its meat buyers for margin. Potential investors should scratch the nature of stated relationships a little more to understand if there are obvious inconsistencies in the value the company is proposing and the way the partner is known to do business.

Finance and Economics

The economic and financial projections presented in the business plan are driven by their underlying assumptions. For this reason, it is important for investors to invest the necessary time to review their veracity and/or plausibility. The assumptions also have to be robust, in that they should hold over the reasonable range of business realities. For example, if selling 2 million gallons of ethanol seems plausible, what will be the impact on the financial projections if only half as much is sold? Similarly, if the break-even capacity is 70 percent, what needs to happen for break-even to occur at 65 percents and how plausible are those new conditions? These sensitivity and scenario analyses offer investors a broader sense about the robustness of the assumptions driving the finance and economic projections.

Positive cash flow indicates the company is able to pay for its operations from its operations, marking the beginning of independence. Similarly, the quicker the company is able to exhibit sustained profits, the easier it becomes for it to address some of the risks that may emerge in its environment, e.g., incumbent reaction, sudden change in market environment, etc. But the critical economic indicator in the finance and economic

category for an investor is the internal rate of return (IRR) and how it compares with the investor's required rate of return (RRR). The IRR measures the annual compound rate of return that the initial investment in the business can generate and the RRR is the minimum return on investment that an investor requires in order to make a particular investment. The RRR is usually a function of the investor's perception of the riskiness of the business: high risk propositions extract higher RRR than low risk propositions. The assessment of the business up to this point should provide the investor an indication of the threshold RRR the investor is willing to accept. This threshold should be compared to the estimated IRR presented in the business plan and a decision made about the business' ability to address the investor's risk perceptions. AgbizSMART Evaluator® reminds investors to demand information in the estimated IRR so they can compare it to their expected RRR.

The net present value (NPV) is the sum of the discounted projected cash flow from the business for a given period. The assumed discount rate is a major determinant of the NPV and as such potential investors should assess the assumption to determine the plausibility of the discount rate. A larger NPV the better if the assumed discount rate is plausible. When comparing the NPV for different businesses, it is important to specify the assumed discount rate for each of them.

The final finance and economic variable considered by AgbizSMART Evaluator® is the strength of equity position, used to assess the amount of investment desired by the business and the equity level the owners or founders are willing to give up for it. Investors should also assess how much they are putting in (cash and other resources) against the proportion of the business they get (equity position). This measures the true cost of the investment.

Fred explained to Spark that the AVAV business plan had indicated that the total valuation of the company was $2.7 million, and the proponents have invested $810,000 for 30 percent and were looking for $1.89 million in exchange for 70 percent. However, they also indicated that they want the $1.89 million to come from producers who are *willing to commit a total of 25,000 acres* of identity preserved production. "How much is that worth?" he asked.

Fred then argued that if each producer-investor incurs a cost of $5,000 in installing, collecting and transmitting the required IP data to AVAV, then that cost should be capitalized into their investment. If it costs an extra $250,000 for the producers to put the infrastructure in place to implement the required IP system, then the company's valuation should be $2.95 million, and not $2.7 million. This implies that the investment of the proponents is actually only 27.46 percent and not 30 percent, and the producers' investment is equivalent to 72.54 percent. This is non-trivial if growth is factored into the investors' expectation. If the company's value should grow to $25 million, then the 2.54 percent is equivalent to $635,000, or 33.5 percent of the investors' original investment cash outlay. This is simple valuation math that causes a lot of inattentive investors to subsidize their attentive partners.

Competitive Advantage

Competitive advantage is the ability to develop and implement value-creating strategies not simultaneously being implemented by current or potential competitors. A sustainable competitive advantage is a competitive advantage that others cannot easily duplicate. Therefore, this category of the AgbizSMART Evaluator® draws attention to the firm's functional state, i.e., resources that ensure its ability to implement value-creating strategies that are not easily duplicated.

Internal resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge and others that are controlled by the firm to enable it implement strategies that improve its chances of gaining market share profitably. These resources are classified into four groups: physical, financial, human and organizational resources. Physical resources include physical technology, plant and equipment, access to raw materials and logistics infrastructure, geographic location, etc. Financial resources include available cash and near-cash assets as well as access to cash. Human resources include the training, experience, knowledge, judgment, intelligence, relationships and insights of the firm's employees, including management. Organizational resources encompass the firm's structure, formal and informal control and coordinating systems, relationships among people and within groups as well as between the firm and its environment – suppliers, customers, regulatory agencies, etc.

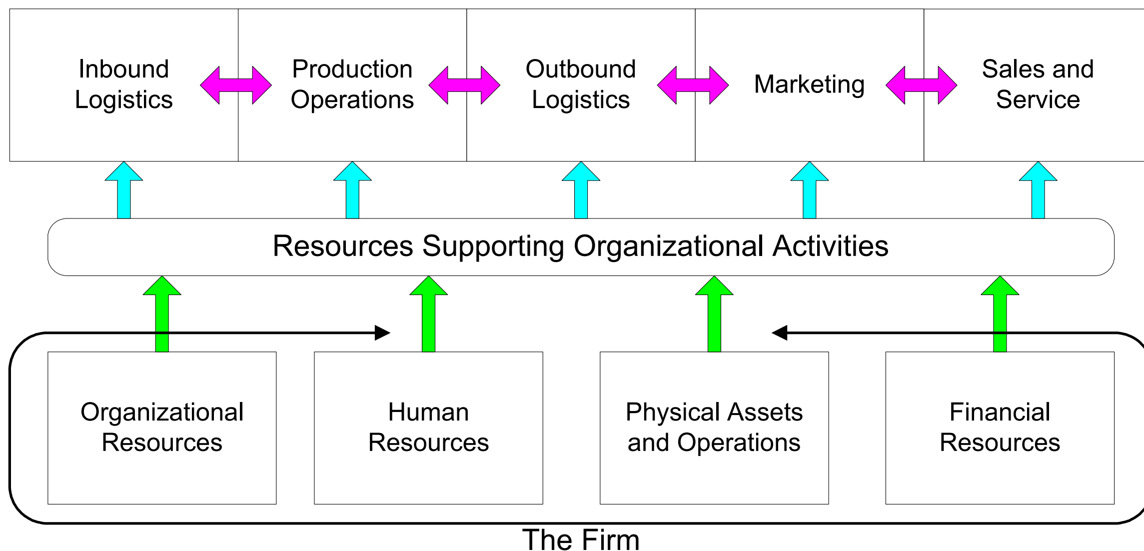
In assessing the strategic relevance of these resources, the investor is looking at their uniqueness, scarcity, value, ease of substitution and degree of duplicability. Value-adding initiatives should focus on developing strategies that encompass strategic resources that exhibit these characteristics to ensure their competitive advantage is sustainable. AVAV has a proprietary technology that will produce high quality input for the cosmetic market. If this technology provides AVAV with high production processes that are uniquely efficient, then it can enjoy a competitive advantage until a competitor figures out how to copy or duplicate the technology. AVAV can use its first-mover advantage to entrench itself in the marketplace, avoid direct competition and challenge threats more efficiently. Similarly, a firm with a strategic relationship with a major input supplier can sustain a competitive advantage over incumbents or new entrants. However, such a major input supply relationship should create efficiencies that allow the firm to differentiate its value proposition in the marketplace. For start-up companies, securing committed relationships with the supply chain, especially distribution, is a critical strategic resource since it can effectively shut out competitors' access to the same channels. AgbizSMART Evaluator® prompts investors to assess the depth and breadth of strategic resources that are in place in the company and evaluate their uniqueness and ease of duplication or substitution. It also draws investors' attention to assess how existing or impending regulations may influence the sustainability of the firm's competitive advantage.

Figure 1 illustrates the approach to evaluating the firm's competitive advantage and its ability to sustain it from a resource-based perspective. Investors assess how the firm's resources combine to create sustained competitive advantage at each process node – inbound logistics, production operations, etc. The objective is to assess how the firm organizes its resources to create a causal ambiguity for its competitive advantage, i.e., how it combines the individual characteristics of its resources to enhance their total value.

Because of its unique impact on a start-up company's success, availability of committed relationships along the supply chain is treated as an indicator in its own right. Investors will be assessing how the proponents of the business have built support and commitment for their products and services within the marketplace to provide the firm with smooth access to inputs and customers. By seeking to secure 50 top producers as its

investors, AVAV is attempting to create committed input suppliers. The geographic distribution of these producers will provide an indication of the input risk management strategies that AVAV is pursuing. AVAV indicated in its business plan that it has already signed a supply agreement with three major manufacturers to use its products in their manufacturing process. The commitment from major customers indicates a strong market access and the fact that it has three of them implies that it is not in a hostage situation with a single major customer. Thus, it has minimized its customer risk by seeking commitment from more than one customer. Investors should request further information on any process node whose competitive advantage is unclear in the business plan to help investors make sensible decisions.

Figure 1: Evaluating Competitive Advantage Using Characteristics of Resources



Personal Fit

Thus far, the AgbizSMART Evaluator® has focused investors' attention on the business. The personal fit category diverts attention to how the investor feels about the business in spite of its attractiveness vis-à-vis management, product/service, market and industry, competitive advantage. The fact that the investor is also a supplier means that there is more at stake than the financial investment. The extent of what is at stake increases with the level of indirect investments that producer-investors have to make to ensure the success of the business. For example, if specific genetics are required, then producer-investors have to cull current genetics and acquire a new one. If the new

genetics are specific to the company, then the company's failure may have serious and broader financial impacts for the producer-investor than a non-producer investor.

As a result of the stakes involved with agricultural value-adding initiatives that require producers to be investors, it is critical that producers evaluate how well the strategic direction of the company fits their personal strategic direction – vision, mission, and core values. The stronger the fit, the greater the willingness of investors to make the necessary commitments to support the company's long-term competitiveness. Willingness to support the company is very important for a new company because it brings it credibility if credible people are supporting it, a resource that can be leveraged in raising financing, securing partner support and acquiring other intangible organizational resources. If a producer is going to commit production to a value-adding business, then it is important for that producer to evaluate how he/she personally feels about the company's durability since investment resources, both cash and production, are limited and committing them one makes them unavailable to others.

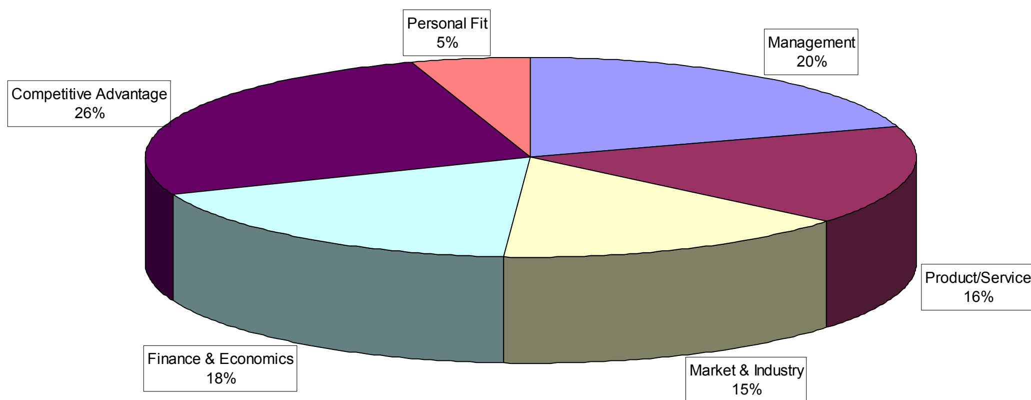
The Decision

The AgbizSMART Evaluator® provides a decision based on a total of 1000 points resulting from the weighted scores of individual indicators in its six evaluation categories. Each indicator in the categories can have a maximum of 10 points, which is multiplied by its weight to provide its score. Competitive advantage accounts for 26 percent of total points (Figure 2). In other words, the competitive advantage position of the firm alone can contribute more than a quarter of its investment attractiveness. This is because the competitive advantage category evaluates the internal resources of the firm at each of its process nodes, and thus encompasses different aspects of other categories. The availability and commitment of partners along the supply chain is such a critical indicator it accounts for 27 percent of the total category points. For this reason, investors must conduct the competitive advantage analysis carefully to capture all its intricacies. Commitment of partners is deemed important to minimize the urge to invest on the belief that markets can be created after production. If investors do not have a clear view on the market and how products are going to get to the market, the business plan is not ready in

its strategic offer. This will become clear in the AgbizSMART Evaluator® results since different categories will fall short by lack of information on market partners.

The next major category is management, accounting for 20 percent of total points. Industry knowledge and network intensity indicators account for almost 50 percent of the management category's total points, implying that poor scores on these may adversely affect the investment attractiveness of the firm. The product/service category and the market and industry analysis category together account for 31 percent, finance and economics category accounts for 18 percent and the personal fit category accounts for the remaining five percent.

Figure 2: Distribution of Investment Attractiveness Index Category



The AgbizSMART Evaluator® is structured to indicate the attractiveness of each of the categories and an overall investment attractiveness index. This allows investors to determine quickly the sources of weakness and strength in the firm's evaluation. It also allows the investor to determine how easily a particular weakness can be addressed. For example, a firm with poor management can end up having a good investment attractiveness index because management can be replaced if there is consistent indication from investors that it is a barrier to the firm's success. On the other hand, a poor investment attractiveness of competitive advantage cannot salvage the company because it cannot be changed easily. Furthermore, a poor attractiveness of the competitive advantage category will also indicate poor attractiveness in the product/service and market and industry categories if investors have performed their evaluation correctly.

Although the AgbizSMART Evaluator® is a subjective tool of how an investor feels about a particular company as an investment opportunity, it allows investors to assess the assumptions underlying the firm's projections as well as their own assumptions about the firm. Its usefulness rests in the fact that if a number of unrelated investors subject the firm to AgbizSMART Evaluator® and come up with comparable investment attractiveness, it can be argued that the evaluation is objective. AgbizSMART Evaluator® can also elevate the knowledge producers have about a particular investment by transforming their mental assumptions into a tangible (written, voiced), and therefore challengeable, format. The conversations engendered by the AgbizSMART Evaluator® also help the proponents of the business to focus on the firm's weak categories, creating the potential of making a good investment even better. For example, if the evaluation consistently shows that investors do not think management has the knowledge and the network intensity to succeed in the industry, then proponents can benefit from that feedback by replacing the current management with one that possesses the identified skills and resources.

To be "GREAT", an investment must have an attractiveness index greater than 950. A "GOOD" attractiveness index lies between 871 and 950 points. An investment with an attractiveness index between 836 and 870 is "OK", 801 and 835 is "BAD" and anything below 800 is "VERY BAD." The attractiveness of the individual categories also provides insight into the sources of weakness in the firm, helping investors identify changes that may be made to enhance the firm's attractiveness. Thus, AgbizSMART Evaluator® provides a *voice* to producer-investors in the shaping of the firm seeking their participation. This is very important in agricultural value-adding initiatives because of the level and complexity of commitment that an investment may demand of its investors.

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The two friends started applying the AgbizSMART Evaluator®tool to the AVAV project, constantly referring to the business plan for answers to questions that came up. They also called researcher friends at the university to confirm some of the information that they were not sure of and discussed each of the indicators extensively to come up with their raw scores – ranging from zero to 10. As they input their raw scores,

AgbizSMART Evaluator® calculated the weighted score and the attractiveness of the categories and the investment attractiveness index.

When they were done, the AVAV investment had an attractiveness index of 835.50, which, according to AgbizSMART Evaluator® was "OK" (Figure 3). But it is right on the border between "BAD" and "OK."

"So, what do you think?" Spark asked Fred.

"I think I've made a lot of mistakes in the past in where I've put my money. I'm not going to do the same with AVAV."

"It seems to have good management, but everything else is just OK. I don't think this is the goldmine," Spark concluded.

"You know the guys from Owen are also seeking investments? May be we should run their business plan through the AgbizSMART Evaluator® to see how it performs," suggested Fred. He pulled the Owen project's business plan and they started working on it with the same painstaking effort they had spent on the AVAV project. They called people, searched the Internet for research articles and government documents, and when it was all done, the Owen project's investment attractiveness index was 920, a "GOOD" investment attractiveness according to AgbizSMART Evaluator®.

"Looks clear to me where we should consider hanging our hats," Fred said.

"Yes, but we have to get other potential investors to use the tool and see how they come out. If they concur with our evaluation, then we know we have one that can be the goldmine. If there are significant differences between our index and theirs, then we need to discover where the differences are and educate ourselves some more so we don't lose our shirts this time around."

"Why don't you get the AgbizSMART Evaluator® to the other producers to help us evaluate our goldmine?"

And with that Spark packed his computer, drained the remainder of the coffee in his mug and stood up, with his hand outstretched to Fred and said "good night." He walked out to his truck and within moment, Fred could hear the roar of the engine from the kitchen. He made his way to the bedroom to look for his wife and business partner.

Figure 3: AVAV Inc. Evaluation by Sparks and Fred

Criteria	Business Name: ____AVAV Inc___		
Management	**Raw Score**	**Indicator Weight**	**Weighted Score**
Industry knowledge	10	5.0	50.00
Industry network intensity	6	4.0	24.00
Sector knowledge	7	2.0	14.00
Management history	10	1.0	10.00
Management integrity	10	4.0	40.00
Functional area knowledge	10	4.0	40.00
Management Attractiveness	**GOOD**	**20.0**	**178.00**
Product/Service			
Strength of niche orientation	10	2.0	20.00
Identified customer segment	6	4.0	24.00
Immediate customer benefits	7	4.0	28.00
Degree of uniqueness of product/service	10	1.0	10.00
Access to strong distribution channels	10	5.0	50.00
Product/Service Attractiveness	**OK**	**16.0**	**132.00**
Market & industry			
Credible size of accessible market	10	2.0	20.00
Ability to go undetected by dominant competitors	8	1.5	12.00
Ease of access to suppliers	10	2.0	20.00
Strength of distribution support	8	4.0	32.00
Strength of other supporting partners	6	3.0	18.00
Ease of growing market share quickly	7	2.5	17.50
Market & Industry Attractiveness	**OK**	**15.0**	**119.50**
Finance & Economics			
Time to break-even (positive cash flow)	10	2.0	20.00
Time to break-even profits	10	3.0	30.00
Internal Rate of Return (IRR) threshold = _____ %	9	5.0	45.00
Net Present Value (NPV)	8	3.0	24.00
Strength of equity position	8	5.0	40.00
Financial & Economic Attractiveness	**OK**	**18.0**	**159.00**
Competitive Advantage			
Inbound logistics	8	4.0	32.00
Production processes	7	4.0	28.00
Outbound logistics	8	4.0	32.00
Marketing and sales	8	4.0	32.00
Availability and commitment of partners	8	7.0	56.00
Risk management strategies	9	3.0	27.00
Competitive Advantage Attractiveness	**OK**	**26.0**	**207.00**
Personal Fit			
Identification with company's strategic direction	6	1.0	6.00
Willingness to support the company	4	1.0	4.00
Confidence in company's durability	10	3.0	30.00
Personal Fit Attractiveness	**OK**	**5.0**	**40.00**
Investment Attractiveness Index	**OK**	100.0	835.50

References and Suggested Reading

Grove, A.S. (1999). *Only the Paranoid Survive*, New York: Doubleday & Company, Inc.

Day, G.S. and D.J. Reibstein. (1997). Wharton on Dynamic Competitive Strategy, New York: J.W. Wiley & Sons, Inc.

Barney, J.B. (2000). Firm Resources and Sustained Competitive Advantage, in J.C. Baum and F. Dobbin (eds.), *Economics Meets Sociology in Strategic Management,* Stamford, CT: JAI Press Inc. pp. 203-227.

Robinson, Marc. (2000). *Essential Finance: Investing Basics: Make Smart Decisions without Being an Expert*, DK Publishing, Inc.

Nofsinger, John R. (2001). *Investment Madness: How Psychology Affects Your Investing . . . and What to Do About It*, Upper Saddle rive, NJ: Pearson Education.

Goldratt, Eliyahu M., Eli Shragenheim, with Carol A. Ptak. (2000). *Necessary But Not Sufficient: A Theory of Constraints Business Novel,* North River Press, Inc.