# ASSESSING MARKET ORIENTATION AND FIRM PERFORMANCE ACROSS VALUE DISCIPLINES IN THE ILLINOIS BEEF SECTOR

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## Abstract

Previous research studies have suggested market oriented firms achieve superior performance relative to their peers (Narver and Slater, 1990). Observed performance differences may be attributable to the firm's ability to clearly define how they provide value to the market (Narver, Slater and Tietje, 1998). Recently, Micheels and Gow (2009) found that highly market oriented and innovative firms are able to more clearly define their value discipline. However, the impact of value discipline clarity on firm performance has not yet been examined. Using a sample of 343 Illinois beef producers, we find that market orientation levels are lowest for operationally excellent producers and highest for customer intimacy producers. Further, we find firm performance to be lowest for firms with an operational excellence value discipline.

*Keywords*: Firm performance, market orientation, value chain, value discipline

Theme: Marketing and Trade

## Introduction

Empirical studies have shown market oriented firms are able to achieve superior performance relative to their peers (Kirca et al., 2005; Menguc et al., 2007; Narver and Slater, 1990). The explanations given for the observed performance differences all revolve around a common theme relating to the market oriented firm's ability to provide superior value to consumers. Further, it has been put forward theoretically (Narver et al., 1998) and shown empirically (Micheels and Gow, 2009) that along with performance benefits, market oriented firms more clearly define how they provide value to customers. Theory suggests that market orientated firms (which focus on the generation and dissemination of market intelligence relating to both customers and competitors) are able to more easily discover opportunity gaps and rapidly provide innovative solutions that deliver superior value to consumers (Kohli and Jaworski, 1993).

If superior performance is a result of superior value provision, how is value created? Within agricultural value chains, value creation should not be thought of as a supply-push system, as it historically has been, but as a demand-pull system. Therefore, in order to truly provide superior value to downstream channel partners and consumers, the supplying firm must clearly understand customer needs and their value proposition. Treacy and Wiersema (1993) suggested that firms provide value through three distinct value disciplines and this may allow the firm to achieve superior performance through the provision of superior value while also efficiently developing the required capabilities needed in their specific market.

The understanding of needs and provision of value should not be limited only to the immediate customer. To be sure, the needs of the final consumer must also be understood by all partners in the value chain. Day (1994) suggests that market oriented firms are better able to develop both market sensing and channel bonding capabilities required to aid in successful value creation. To be clear, a market orientation only allows firms to determine where potential opportunities exist. As suggested by Chen (1996), the firm still must be motivated to act on the opportunity and also

possess the specific capabilities required to exploit the opportunity. A market orientation is, however, an important resource in determining the appropriate investments that need to be made in order to develop the required capabilities.

Agricultural firms employ a variety of strategies to provide superior value to their customers. Within the agri-food sector, the first input of the value chain is often a commodity product, leading many producers to adopt a low-cost strategy as they have little control over prices received. However, an increasing number of producers have recently moved away from commodity production by providing a differentiated product. An example within the context of the U.S. beef industry would be the shift to vertically coordinated production alliances. Since the 1990s, the amount of beef produced through production alliances has steadily increased (Drovers, 2008; Lamb and Beshear, 1998). Entrepreneurial beef alliances have generally been formed to take advantage of valuable, often proprietary information and to leverage this information to provide a differentiable product to consumers (Schroeder and Kovanda, 2003). As providers of differentiated, and often branded, products alliance producers have benefited from premium prices over and above the commodity price. The unanswered question, however, is how does this translate into overall performance? The objective of this research project is to shed some light on the market orientation and performance differences across value discipline strategies.

Generic strategies for creating value revolve around the firm becoming either the low-cost producer or a provider of differentiated products (Porter, 1985). Clearly defining one's value discipline would allow the firm to efficiently deploy resources to develop only the capabilities needed to succeed within their chosen market. Alternatively, it has been suggested that firms who do not possess this capability become reactive to the market which clouds their ability to clearly define how they provide and as such, they end up becoming 'stuck in the middle' (Porter, 1985). Furthermore, no study to date has attempted to examine the level of market orientation or firm performance of firms *across* value discipline strategies. This study attempts to fill this gap in the literature by examining the extent of market orientation and differences in firm performance across various value discipline strategies within the context of the Illinois beef industry.

#### **Theoretical Foundations**

In a strategic sense, the external focus embodied in a market orientation examines customer needs (and competitor actions), while the internal focus examines the firm's ability to adequately provide solutions to meet these needs. By developing processes and systems to gain possession of superior information on customer needs relative to their competitors and the ability to shape this into exploitable opportunities to meet these needs, market oriented firms may develop a strategy which allows the firm to succeed within their specific market. White (1986) labelled the external processes the corporate strategy problem (i.e. 'where should we compete?') and the internal processes the business strategy problem (i.e. 'how do we compete?'). The order in which these questions are answered is dependent on whether the firm is choosing a market dependent on its current capabilities or choosing to build capabilities required to compete and succeed in a specific market (Homburg et al., 2004).<sup>40</sup>

Within competitive landscapes, firms may employ several strategies to exploit economic opportunities based on their current capabilities. Porter (1985) describes three generic strategies: cost leadership, differentiation, and focus. Porter further suggests a focus strategy can be combined with either cost leadership or differentiation and is used to "narrow the competitive scope within an industry" (1985, p. 15). By focusing on a specific group of consumers, firms may be better able to gather pertinent information and thus create products which are tailored to a specific market. In the

<sup>&</sup>lt;sup>40</sup> These authors refer to these competing dichotomies as the *strategy formulation perspective* where current capabilities dictate strategy choice and the *strategy implementation perspective* where strategy choice leads to the development of specific capabilities to employ in the chosen strategy.

language of Day (1994), through a focus strategy the firm may be better positioned to establish channel bonds and customer linkages.

Expanding the thoughts of Porter (1985), Treacy and Wiersema (1993) first introduced the concept of value disciplines to describe the various means by which firms provide value to consumers. Treacy and Wiersema posit that "the key to gaining and sustaining value leadership [within a specific value discipline] is focus" (1993, p. 93). That is, in order for firms to sustain success, they have to be able to clearly define *how* they provide value to customers, and how this method of provision is different from competitor offerings. Treacy and Wiersema (1993) put forward three such methods to deliver value to the consumer built upon firms' relative strengths and weaknesses: *Operational Excellence, Customer Intimacy,* and *Product Leadership.*<sup>41</sup> Narver et al. (1998) theorize that market oriented firms are more likely to express clarity on their value discipline, that is, they are more likely to operate along the boundary of the value triangle rather than being 'stuck in the middle.' Slater and Narver (1996) find that a market orientation contributes to both low-cost and differentiation strategies, while Menguc et al. (2007) find a market orientation leads to the implementation leads to the implementation of a low-cost strategy.

Within agri-food value chains, up-stream producers have generally operated under a low-cost, operational excellence value discipline as they are often producers of homogenous, commodity products. More recently, entrepreneurial producers have begun to form differentiated value chains via production and marketing alliances. While innovative, there is a risk that these firms, instead of becoming market leaders, are becoming market led and as a result are less clear how they provide value to down-stream channel participants. In these instances, it may be beneficial for the channel partners to develop a shared vision of the entire value chain and operate within a customer intimacy or product leadership value discipline.

Recently, Micheels and Gow (2009) found evidence that suggests firms possessing a higher level of market orientation and innovativeness are able to more clearly define their value discipline. However, neither the influence of value discipline clarity on firm performance nor the performance differences across value disciplines have been examined. Earlier research by Porter (1985) outlined several cases where the failure of firms was attributed to their loss of focus resulting in the firm becoming 'stuck in the middle.' Porter (1985) suggested that firms who are able to clearly define their value discipline should outperform rivals in terms of both effectiveness and efficiency. Customer value, and satisfaction, would theoretically increase when a firm focuses on the specific measures which contribute to the value proposition of consumers. Furthermore, by focusing on developing one specific value discipline, firms would be able to efficiently deploy scarce resources in the development of the capabilities needed for success.

Operating at the boundary of the value triangle might have several strategic advantages. Firms along the value triangle boundary may be better positioned to gather customer information which can be used to provide further value. Through this 'locational advantage' it may be easier to develop the customer linking capability (Day, 1994) which can be utilized in the development of new product or market innovations. Secondly, value discipline clarity enables the firm to be more efficient in the allocation of resources when developing and implementing their strategy. A third, and possibly

<sup>&</sup>lt;sup>41</sup> The operational excellence value discipline is similar to the cost leadership strategy of Porter (1985) and is the dominant strategy in commodity markets such as agriculture. As producers are generally unable to affect the price they receive, increasing efficiency is seen as the only method to earn higher profits in this market. Customer intimacy and product leadership would seem to fall into the differentiation strategy of Porter (1985) with a customer intimacy value discipline focusing on providing the exact product to meet a specific customer's needs. A product leadership value discipline searches for sources of product innovations and markets them quickly to become the first-mover in the market.

more important long-term benefit, is that the boundary of the value triangle is a better strategic location to defend from competition (Figure 1). Highly market oriented firms (High MO) are thought to clearly define their value discipline, that is, they are thought to be positioned on or near the border of the value triangle. Less market oriented firms (Low MO) are thought to be unable to clearly define how they provide value to consumers and therefore end up 'stuck in the middle' (Porter, 1985).





**Customer Intimacy** 

Moving to a new value discipline requires firms to be cognizant of consumer demands within a particular value discipline as well as their own capabilities. Alertness enables firms to more easily adopt the required cultural and behavioural changes needed to be successful. According to Chen (1996), behavioural changes are based on awareness and motivation within the firm, as well as the capability to implement the behavioural change. Therefore, the location on the value triangle may be based on the market orientation of the firm (awareness), the ability to achieve superior performance and potential competitive advantages (motivation) and the ability of the firm to develop and maintain that position (capability). Conversely, firms may develop strategies based on their current capabilities. As the development of the vital capabilities within each value discipline may occur at varying rates across firms, several strategies may be evident. Firms with a clearly defined value discipline and the time necessary to develop the appropriate capabilities may exhibit a 'pure' value discipline, exemplified by a position on one of the corners of the value triangle (Figure 2).

A clearly defined value discipline may be possible for firms with extreme levels of market orientation combined with the appropriate core competencies. Other firms may see an opportunity to provide value based on a 'hybrid' of two value disciplines, such as low-cost product leadership (fast second movers), or efficient customer relationship building (production alliances in the beef industry). A hybrid strategy could result from the firm moving from one value discipline to another, or it could be the manifestation of the actual strategic choice of the firm. Firms with a hybrid value discipline position themselves on the value triangle based on the level of importance they place on two competing value disciplines. Still other firms may lack a clearly defined value discipline and are represented by firms clustered in the middle of the value triangle, what Porter (1985) refers to as being 'stuck in the middle.'

## Figure 2. Stylized Strategic Choices within the Value Triangle



#### Methodology

Data

A mailing list was obtained in 2007 from the Illinois Beef Association containing current members was used to comprise the population for the study. The list was inspected and ineligible commercial businesses were purged from the population. This resulted in a total of 1568 eligible beef producers. In two waves of surveying, 343 usable responses were returned yielding a response rate of 22.1%. These producers were active in both the cow-calf and feedlot segments of the production channel with an average of 77 calves raised and 495 head of cattle fed out in each respective group.<sup>42</sup> Respondents had, on average, 32 years of experience.

As late respondents have been shown to be similar to non-respondents, non-response bias was examined between early and late respondents in each wave of the survey using the procedures outlined in Armstrong and Overton (1977). No significant differences were found between early and late respondents suggesting non response bias may not be a large concern with this study.

#### **Measurement Scales**

The measures assessing market orientation and subjective performance were taken from previously tested and validated scales. In the survey, respondents were asked to rate their level of agreement with each item using a 6-point likert scale anchored with strongly disagree and strongly agree. The MKTOR scale developed by Narver and Slater (1990), which has been used in several other studies, was used to measure market orientation. Subjective performance was measured using a scale developed by Jaworski and Kohli (1993) as well as several new items. While objective performance measures would be preferred subjective performance has been shown to be highly correlated with objective performance measures (Dess and Robinson, 1984; Pearce et al., 1987; Venkatraman and Remanujam, 1987). This is important as our sample is comprised of owner/managers of privately held firms who are generally unwilling to share personal financial information.

Slight modifications were made to the wording of all scales as the previous intended audience consisted of executives and division managers of large, multi-national corporations, not agricultural

<sup>&</sup>lt;sup>42</sup> Some producers operate in both segments. Averages were taken from firms who feed out at least 50 head of cattle and who raise at least 20 calves.

producers. Following item modification, face validity was checked by marketing experts and University of Illinois extension specialists along with a small sample of Farm Business Farm Management Association (FBFM) farm cooperators. FBFM co-operators were mailed surveys and were then asked to read through the questions and provide comments relating to both clarity and content. Final versions of the scale measures were then drafted per the suggestions of the extension specialists and the sample of FBFM co-operators.

Principal component analysis was used to arrive at a measure for the market orientation and subjective performance of the firms. All analysis was conducted using SPSS 16.0, a statistical software package. Factors were retained according to the criteria that they 1) possessed eigenvalues greater than one, and 2) when multiple factors were observed, only the three highest factors were retained. In total, three factors were retained for the 15-item market orientation scale measuring customer focus, competitor focus and interfunctional coordination. Average variance extracted for each market orientation component is over 50%, indicating more variance is attributed to the scale than to random error (Appendix A). Subjective performance was analyzed using a seven-item scale consisting of new and modified measurement items. The seven item scale reduced to two factors, measuring individual and comparative performance. These two factors accounted for 68.9% of the variation of the scale.

The choice of value discipline was measured using a new scale developed in Micheels and Gow (2009). Respondents were asked to assign points to phrases which corresponded to the various value disciplines (Appendix B).<sup>43</sup> The choice of value disciplines is modelled based on ternary diagrams where the combination of three components must equal 100. The new scale allows for the positioning of the farm onto a value triangle using an Excel program developed by Graham and Midgley (2000). The expressed choice of value discipline of the survey respondents can be seen in Figure 3.

## Classification into Value Disciplines

Firms were classified into several stylized value disciplines based on their positioning within the value triangle. Firms who scored higher than 70 on any value discipline were assigned to the 'pure' form of that specific value discipline. Firms with a score of less than or equal to 15 on a singular value discipline, while simultaneously having a score less than 70 in the remaining value disciplines, were assigned a 'hybrid' value discipline. The remaining firms were categorized as having no clear value discipline. Visual inspection of the classifications was conducted to check for any errors.

Analysis of variance (ANOVA) methods were used to test for significant differences in market orientation and performance between the seven stylized value discipline choices. Specifically, the Tukey-Kramer test was employed to examine differences across value disciplines as this test is robust when sample sizes across groups are unequal. Descriptive statistics of the sample can be seen in Table 1.

<sup>&</sup>lt;sup>43</sup> Customer intimacy score was the average score from Pricing S1, Production S2, Relationships S1, and Quality S1. Product leadership was the average score from Pricing S2, Production S1, Relationships S3, and Quality S3. Operational excellence was the average score from Pricing S3, Production S3, Relationships S2, and Quality S2.

#### Figure 3. The Value Disciplines of Illinois Beef Producers

![](_page_6_Figure_4.jpeg)

Table 1. Descriptiv	e Statistics
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Variable	Mean	ean Std. Deviation		ıge
			Min	Max
Market Orientation	-0.07	2.99	-10.62	7.51
Performance	0.09	1.67	-6.10	4.48
Size (Fed cattle) Size (Cow/Calf)	184.36 61.04	832.94 71.77	$0.00 \\ 0.00$	10000.00 540.00
Number	309			

#### Results

The results of this study show market oriented firms employ several value discipline strategies, which is not limited to the 'pure' forms as was previously suggested. If the theory of Narver, Slater and Tietje (1998) was correct, we would expect the level of market orientation (MO) to follow a relationship where:

#### MO (Pure) > MO (Hybrid) > MO (Middle)

The pattern that emerges indicates market orientated firms do not see themselves as operating within a pure operational excellence value discipline (or conversely that operationally excellent firms are not market oriented). Firms operating with a hybrid value discipline which does not include a significant portion of operational excellence characteristics have higher levels of market orientation than those firms with an operational excellence background. This result corroborates Menguc et al. (2007), who found a market orientation contributes to innovation or customer-based strategies, but does not lead to cost leadership strategies.

Further, the value discipline choice with the lowest market orientation corresponds with the value discipline choice with the lowest level of performance. This may have been expected given the results of previous research (Kirca, et al., 2005; Narver and Slater, 1990). Firms with a customer

intimacy/product leadership value discipline have a significantly higher market orientation than firms utilizing an operational excellence value discipline. Again, these results are similar to those of Menguc et al. (2007).

In addition, the results show firms within the operational excellence value discipline achieve significantly lower performance than that of firms operating under a product leadership hybrid discipline. No other statistically significant differences in subjective performance are observed, which does not mean these results lack economic significance. Nevertheless, this is a surprising result given the theoretical arguments brought forward by Porter (1985) and Treacy and Wiersema (1993). However, when considering that firms within an operational excellence value discipline also have the lowest market orientation, the performance result is less surprising. The results of this study show elevated levels of market orientation across a variety of several stylized value discipline strategies. These results are not able to provide evidence to suggest that market orientation leads to value discipline clarity which, in turn, enables firms to achieve superior performance as they are more aware of customer needs. These results do show, however, that firm performance is associated with a market orientation.

Strategy	Market Orientation	Performance	Ν
Pure CI	0.658 (2.60) <sub>a</sub>	0.507 (1.46)	25
Pure OE	-2.528 (3.22) <sub>abcd</sub>	-0.574 (1.81) <sub>ab</sub>	64
OE/CI	-0.147 (2.25) <sub>de</sub>	-0.183 (1.67)	37
OE/PL	-0.548 (2.54)	1.52 (1.89) <sub>b</sub>	6
CI/PL	1.767 (2.18) <sub>ce</sub>	0.431 (1.55) <sub>a</sub>	35
MIDDLE	0.650 (2.60) <sub>b</sub>	0.040 (1.59)	145

Table 2. Market orientation and subjective performance across value discipline strategies.

*Note:* Table displays scale mean (standard deviation in parentheses). No Pure PL strategy is analyzed as there was only one firm employing this strategy. Standard deviations are in parentheses. Subscripts a,b,c,d,e denote a significant difference between strategies sharing that label (p = .05). Performance between Pure CI and Pure OE is significantly different at the p = 0.10 level.

# Discussion

Treacy and Wiersema (1993) have suggested that when a firm chooses a value discipline, they are simultaneously choosing their customers. This is important as it encourages firms to search for opportunities to provide value for consumers in a manner that is congruent with their value proposition. A market orientation therefore may enable firms to develop and market innovative methods to provide products and services to meet these changing needs. It is for this reason that Treacy and Wiersema (1993) and Porter (1985) have posited that the ability to define ones value discipline could lead to superior performance.

Understanding the means of providing superior value is important in order for firms to achieve increased performance. However, a clear idea of the firm's value discipline may provide other benefits as well. It has been suggested that it may be important for firms to avoid becoming 'stuck in the middle' lest they end up out of business ala Lacker Airlines (Porter, 1985). However, the results presented here show performance is not dependent on the magnitude of value discipline clarity. Contradictory to previous theory, firms with no clear value discipline (MIDDLE) have performance measures which are not statistically significantly different from firms with a pure value discipline (Pure CI). Another interesting result is the lack of a statistically significant difference in performance across hybrid value disciplines, especially considering there are observed differences in market orientation across hybrid forms.

What is not contradictory, however, is the evidence which suggests firms with a market orientation have improved performance as a result. While this research is not able to show evidence of a market orientation-clarity-performance link, it does show clarity alone does not guarantee superior performance. There are several interesting implications of this result. First, our results corroborate previous research studies by again showing market orientation to be an important driver of firm performance, even within the context of production agriculture. Further, these results show value discipline clarity does not *guarantee* superior performance. Practically, this may mean that without an appropriate market orientation in conjunction, value discipline clarity alone provides few sustainable competitive advantages. A necessary condition for improved performance may be the presence of a market orientation which allows firms to more fully understand the fundamental drivers of the customer's value proposition. It could be that only when a market orientation is present can value discipline clarity lead to superior performance.

Another explanation could be found in the innovative concept of 'blue oceans' and 'red oceans' which relate to the level of competition in the market (Kim and Mauborgne, 2005). Firms using an operational excellence value discipline try to provide superior value through standardized products delivered for a lower cost. However, when many firms are employing a similar strategy, performance often suffers (Porter, 1991; Teece, Pisano and Shuen, 1997). This is exactly what has been suggested by Jones' (2000) study of the cow/calf sector in the United States beef industry. Levels of increased competition would be what Kim and Mauborgne (2005) consider a 'red ocean.' Within these competitive environments, generally only the largest firms see increased performance as economies of size and scale are important cost drivers. Firms who do not possess these advantages may choose to provide value in a different form. Through an increased market orientation, they may find themselves moving to a 'blue ocean' characterized by less direct competition and an increased opportunity for differentiation. However, moving to a 'blue ocean' likely involves higher costs of production and marketing as well as a level of uncertainty relating to the success of the marketing innovation.

There are some limitations of this paper; therefore, some caution is needed when attempting to generalize these results. One limitation of the study is that it uses data from only one year to analyze value discipline choice and firm performance. Longitudinal data would be preferred, as this would allow researchers to 'track' the value discipline and the market orientation of the firm and determine if it was consistent through time. It may be that superior performance accrues to firms with a *consistent* value discipline (as measured year-to-year) and increased variability in both the choice of value discipline and level of market orientation contributes to poor performance. This could potentially explain how firms supposedly 'stuck in the middle' are more highly market oriented than those with an operational excellence value discipline, and how firms in the middle of the value triangle have similar performance to firms with a pure customer intimacy value discipline.

#### **Conclusions and Implications**

The goal of this paper was to analyze market orientation and subjective performance across value disciplines. Previous research studies have suggested that firms who have a clearly defined value discipline are able to achieve superior performance. Surprisingly, there has been a dearth of research which explicitly examines this relationship. A survey conducted in 2007 was used to measure the market orientation, subjective performance, and choice of value discipline of Illinois beef producers. Firms were categorized into separate value discipline strategies based on objective criteria. Analysis of variance (ANOVA) methods were utilized to measure differences across value discipline strategies.

Findings from this paper indicate that the average level of market orientation is lower for firms with an operational excellence value discipline (both pure and hybrid forms) relative to other value disciplines. Furthermore, it is also observed that firms with a product leadership hybrid value discipline have higher performance measures than firms using an operational excellence value discipline. While this paper lends some credence to the market orientation-performance relationship, it does not provide clear answers to the value discipline clarity-performance link. This paper shows that value discipline clarity is not perfectly correlated with superior performance. However, there is evidence to suggest that appropriate levels of market orientation do lead to superior performance. Therefore, in practice firms should not only strive for clearly defined value disciplines but also for increased market orientation.

Within agricultural value chains, a market orientation may allow firms to simultaneously provide value to consumers while contributing to value discipline clarity. Within the context of the Illinois beef industry, our findings show the magnitude of market oriented within firms is a more important determinant of firm performance than value discipline clarity. More research needs to be conducted across a variety of agricultural sectors to clarify these results. Furthermore, future research could examine the market orientation-clarity-performance question in a longitudinal study to assess how consistency of market orientation and consistency of choice of value discipline contributes to firm performance.

# Appendix A. Reliability and Validity for Market Orientation and Firm Performance Scales

				Corrected
		Variance	Factor	Item-to-Total
Measurement Items (only retained items are displayed)	Alpha	Extracted	Loadings	Correlation
Customer Orientation (based on Narver, Slater, and MacLachlan, 2004)	0.744	57.63%		
1. We continuously try to discover additional needs of our customers of which they are unaware			0.846	0.634
2. We incorporate solutions to unarticulated customer needs in our new products and services.			0.826	0.614
4. We innovate even at the risk of making our own products obsolete.			0.527	0.332
5. We work closely with lead customers who try to recognize their needs months or even			0.794	0.580
years before the majority of the market may recognize them.				
Competitor Orientation (based on Narver and Slater, 1990; Porter 1980)	0.846	52.44%		
1. Employees on our farm share information concerning competitor's activities.			0.656	0.536
3. Top management regularly discusses competitor's strengths and weaknesses.			0.660	0.543
4. We target customers where we have an opportunity for competitive advantage.			0.615	0.494
5. Members of our farm collect information concerning competitor's activities.			0.758	0.643
6. We diagnose competitor's goals.			0.802	0.699
8. We identify the areas where the key competitors have succeeded or failed.			0.758	0.633
9. We evaluate the strengths and weaknesses of key competitors.			0.797	0.679
Interfunctional Coordination (based on Narver and Slater, 1990)	0.753	57.57%		
1. We generally regularly visit our current and prospective customers.			0.718	0.503
2. We freely communicate information about our successful and unsuccessful customer			0.725	0.509
experiences across all business functions.				
3. All of our business units (marketing, production, research, finance/accounting) are integrated			0.817	0.616
in serving the needs of our target markets				
4. People on our farm understand how everyone in our business can contribute to creating			0.772	0.557
customer value.				
Overall Firm Performance	0.834	68.98%		
The return on farm assets did not meet expectations last year.*			0.819	0.637
We were very satisfied with the overall performance of the farm last year.			0.827	0.688
The return on production investments met expectations last year.			0.849	0.753
The cash flow situation of the farm was not satisfactory.*			0.779	0.553
The return on marketing investments met expectations last year.			0.712	0.657
The prices we receive for our product is higher than that of our competitors.			0.863	0.285
The overall performance of the farm last year exceeded that of our major competitors.			0.802	0.524

## Appendix B

* Pricing         We are able to set or negotiate above market prices for our cattle as we have         ************************************	Pricing         We are able to set or negotiate above market prices for our cattle as we have established close relationships with our customers and fully understand their specific requirements.		These questions relate to different components of your beef operation. Each ite descriptions of marketing strategies. Please distribute 100 points among the thr on how similar the description is to your beef operation. There is no one right ar points. Most beef producers will be a mixture of those described. For example Marketing Strategy 1 Strategy 2 Strategy 3	m contair ee descri iswer and 15 60 25 100	ns three iptions depending d please use all 100
We are able to set or negotiate above market prices for our cattle as we have         In established close relationships with our customers and fully understand their         In specific requirements.         We are continuously developing or adopting new technology that provides us a short term competitive market and price advantage.         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices, we strive to continually         In the being unable to influence current market prices to meet our customers specific product         In the price of the product production or marketing advantages.         In the price of the produce produce efficiency by our neighbors and peers         In the price of the produce produce efficiency gains.         In the produce produce that meet each of their specific requirements.         As producers and marketers of commodity beef through independent auctions,         In the product product differentiation.         In thestaphilosing relationships with head customers	We are able to set or negotiate above market prices for our cattle as we have established close relationships with our customers and fully understand their specific requirements.	5	Pricing		
We are continuously developing or adopting new technology that provides us a short term competitive market and price advantage.	We are continuously developing or adopting new technology that provides us a short term competitive market and price advantage.	51	We are able to set or negotiate above market prices for our cattle as we have established close relationships with our customers and fully understand their specific requirements.	-	
Bue to being unable to influence current market prices, we strive to continually become more efficient in an effort to reduce costs.       100         Image: Second more efficient in an effort to reduce costs.       100         Image: Second more efficient in an effort to reduce costs.       100         Image: Second more efficient in an effort to reduce costs.       100         Image: Second more efficiency advantages.       100         Image: Second more efficiency by our neighbors and peers due to our continuous efforts to produce efficiency gains.       100         Image: Second more efficiency by our neighbors and peers and attempt to produce products that meet each of their specific requirements.       100         Image: Second more efficiency with each of our customers and thempt to produce products that meet each of their specific requirements.       100         Image: Second more efficiency with them.       100         Image: Second more efficiency advect on the specific requirements.       100         Image: Second more efficiency advect on the specific requirements.       100         Image: Second more efficiency advect on and earl	Due to being unable to influence current market prices, we strive to continually become more efficient in an effort to reduce costs.       100         Production       100         We are continuously developing new and innovative technologies that provide our farm with product, production or marketing advantages.	2	We are continuously developing or adopting new technology that provides us a short term competitive market and price advantage.	-	
6       Production         We are continuously developing new and innovative technologies that provide our farm with product, production or marketing advantages.	Production	រេ	Due to being unable to influence current market prices, we strive to continually become more efficient in an effort to reduce costs.	-	100
We are continuously developing new and innovative technologies that provide our farm with product, production or marketing advantages.	We are continuously developing new and innovative technologies that provide our farm with product, production or marketing advantages.	6	Production		
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#### References

- Armstrong, J.S and T.S. Overton. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Science.* 16 (3): 369-402.
- Chen, M. (1996). Competitor Analysis and Interfirm Rivalry: Toward a Theoretical Integration. *Academy of Management Review.* 21 (1): 100-134.
- Day, G. (1994). The Capabilities of Market-Driven Organizations. J. Marketing. 58 (4): 37-52.
- Dess, G.G. and R.B. Robinson, Jr. (1984). Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-Held Firm and Conglomerate Business Unit. *Strategic Management Journal.* 5 (3): 265-273.
- Drovers. (March 16, 2008). "2008 Alliances."
- Graham, D.J., and N.G. Midgley. (2000). Graphical Representation of Particle Shape Using Triangular Diagrams: An EXCEL Spreadsheet Method. *Earth Surface. Processes and Landforms.* 25 (13): 1473–1477.
- Homburg, C., H. Krohmer, and J.P. Workman, Jr. (2004). A Strategy Implementation Perspective of Market Orientation. *Journal of Business Research.* 57 (12): 1331-1340.
- Jaworski, B.J. and A.K. Kohli. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*. 57 (3): 53-70.
- Jones, R. (2000). Costs, Distribution of Costs, and Factors Influencing Profitability in Cow-Calf Production. Research Bulletin 3-2000 Research Institute on Livestock Pricing, Agricultural and Applied Economics, Virginia Tech.
- Kim, W.C. and R. Mauborgne. (2005). Blue Ocean Strategy. Boston, MA. Harvard Business School Press.
- Kirca, A.H., S. Jayachandran, and W.O. Bearden. (2005). Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance. *Journal of Marketing.* 69 (2): 24-41.
- Lamb, R.L. and M. Beshear. (1998). From the Plains to the Plate: Can the Beef Industry Regain Market Share? *Economic Review.* Federal Reserve Bank of Kansas City. Third Quarter. Available at: http://www.kc.frb.org/publicat/ECONREV/PDF/4q98lamb.pdf.
- Menguc, B., S. Auh, and E. Shih. (2007). Transformational Leadership and Market Orientation: Implications for the Implementation of Competitive Strategies and Business Unit Performance. *Journal of Business Research.* 60 (4): 314-321.
- Micheels, E.T. and H.R. Gow. (2009). Do Market Oriented Firms Demonstrate Clarity on Their Value Discipline: Evidence from Illinois Beef Producers. *International Food and Agribusiness Management Review.* 13 (3): 127-152.
- Narver, J.C. and S.F. Slater. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*. 54 (4): 20-35.

- Narver, J.C., S.F. Slater and B. Tietje. (1998). Creating a Market Orientation. *Journal of Market Focused Management.* 2 (1): 241-255.
- Pearce, J., D. Robbins and R. Robinson. (1987). The Impact of Grand Strategy and Planning Formality on Financial Performance. *Strategic Management Journal*. 8 (X): 125-134.
- Pelham, A.M. (1997). Market Orientation and Performance: The Moderating Effects of Product and Customer Differentiation. *Journal of Business and Industrial Marketing*. 12 (5): 276-296.

Porter, M.E. (1985). Competitive Advantage. New York: Free Press.

- -----. (1991). Towards a Dynamic Theory of Strategy. *Strategic Management Journal.* 12 (Special Issue): 95-117.
- Schroeder, T.C. and J. Kovanda. (2003). Beef Alliances: Motivations, Extent, and Future Prospects. *Veterinary Clinics of North America Food Animal Practice*. 19 (2): 397-418.
- Slater, S.F. and J.C. Narver. (1996). Competitive Strategy in the Market-Focused Business. *Journal of Market-Focused Management*. 1 (2): 159-174.
- Teece, D.J., G. Pisano, and A. Shuen. (1997). Dynamic Capabilities in Strategic Management. *Strategic Management Journal*. 18 (7): 509-533.
- Treacy, M. and F. Wiersma. (1993). Customer Intimacy and other Value Disciplines. *Harvard Business Review*. Jan/Feb 84-93.
- Venkatraman, N. and V. Ramanujam. (1987). Measurement of Business Economic Performance: An Examination of Method Convergence. *Journal of Management*. 13 (1): 109-122.
- White, R.E., (1986). Generic Business Strategies, Organizational Context and Performance: An Empirical Investigation. *Strategic Management Journal.* 7(3), 217-231.