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Strategic Group Analysis of U.S. Food Businesses Using the Two-step Clustering Method

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Abstract

Utilizing strategic group analysis, this study classifies food businesses based on their propensity toward the different generic strategies and planning intensity. Data from a national survey was analyzed using the two-step clustering method. The resultant three groups are profiled based on their generic strategies and planning efforts, as well as their planning flexibility, view of industry volatility (dynamism), strategic emphasis on innovation, innovation, size, experience and financial performance. Managerial implications are made for each of these groups based on the profiles.

Keywords: strategic group; planning; strategy; performance

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Introduction

The food processing industry may be a mature industry, but it is an important sector of the American economy. Essman (2009) estimates that this industry generates approximately one trillion in annual sales. According to the most recent Census of Manufacturers, in 2002 there were 31,000 food and beverage processing establishments in the United States, owned by 25,800 companies (Gayle 2005). More current data gathered by the United States Department of Agriculture indicated that in 2005, these plants accounted for 13 percent of the value of shipments from all U.S. manufacturing plants (Martinez 2007).

This significant industry faces enormous competitive pressures and ever changing consumer demand. Firms operating in this arena must find a way to compete. Porter (1980) notes that a firm can choose among three generic strategies: overall cost leader, differentiation, or focus/niche. The academic literature and business press are replete with suggestions on how firms ought to conduct varying functions in order to execute their decisions regarding how they choose to compete. But how does a firm know which activity to execute given a particular generic strategy? Is there a common practice of combining planning and competitive strategy choice? Does such a practice really matter with respect to firm performance?

Utilizing strategic group analysis – also referred to as typologies, gestalts, modes, archetypes, strategic scope groups, and competitive groups (Short, et al. 2008) – this study classifies food businesses based on their propensity toward the different generic strategies and planning intensity. The resultant groups are profiled based on their generic strategies and planning efforts, as well as their planning flexibility, view of industry volatility (dynamism), strategic emphasis on innovation, innovation, size, experience and financial performance. The results provide insight into firm behavior and offer suggestions for existing and nascent food companies, as well as other companies in environments similar to the food industry.

The paper begins with an overview of the various factors considered by this study. Then the data and method utilized are explained and the results presented. The paper ends with conclusions and implications for practitioners.

Literature Review

It is important for a firm in any industry to understand the competitive landscape. Dess, Lumpkin and Eisner (2010) suggest that "How firms compete with each other and how they attain and sustain competitive advantages go to the heart of strategic management" (p.156). It is the former topic, how firms compete with each other, that has motivated many researchers to conduct strategic group analysis of industries. However, strategic group analysis is but one name used for this type of research. Others include:

> typologies (e.g. Miles and Snow 1978), gestalts (Miller 1981), generic strategies (Porter 1980), modes (Mintzberg 1973), archetypes (Miller and Friesen 1978), strategic groups (Porter 1980), strategic scope groups (Houthoofd and Hene 1997), and competitive groups (e.g., Leask and Parker 2007; Short et al. 2008, 1054).

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Regardless of the moniker, the intent of these studies is to group firms by like strategies. Dikmen et al. (2009) note that this type of work increases the understanding of how an industry is structured, how firms compete, and how dynamic the competitive environment is. The objective of the current study is to determine general groups of food processors based on their strategy, and as a result empirically determine the competitive structure of the industry.

Price and Newson (2003) identified three dimensions of strategy in any strategic problem: 1) strategy content, 2) strategy process, and 3) strategy context. Strategy content is the competitive strategy demonstrated by a firm. The strategy process is how the business comes to that competitive strategy. Finally, strategy context deals with the competitive environment and the business's capabilities and resources. Dikmen, et al. (2009) identify variables for all three categories and identified three distinct groups based mainly on the strategy process and context variables.

The type of competitive strategy exhibited by businesses is one such topic. Miller and Friesen (1978), Miles and Snow (1978), and Porter (1980) are three of the seminal studies in setting a typology for competitive strategy, with Porter's typology being arguably the most widely adopted. Since these studies, authors like Dess and Davis (1984) and more recently Dikmen et al. (2009), have shown that firms do exhibit a specific competitive strategy. The first group-determining criterion for the current study is the choice of generic strategy. According to Porter (1980), three generic strategies enable a firm to make sound decisions in pursuit of an advantage over their competitors in the long run: overall low cost, differentiation, and focus. Overall low cost strategy focuses on attaining the least cost position relative to competitors while not ignoring quality, service, or other product/value chain attributes. The differentiation strategy focuses on creating a novel product or upgrading existing products, which should demand higher than average market prices. Finally, a focus or niche strategy concentrates on customer segments and intensive responsiveness to those segments. Specifically, this identifies the attention paid to customer service and after-sales support. Since Des and Davis (1984) operationalized these generic strategies, several studies have explored their importance to a firm's success. Studies like Dikmen et al. (2009) and Panayides (2003) used generic strategies to conduct strategic group analysis. Other studies looked at the influence on firm performance of competitive strategies in conjunction with other factors (e.g. Baier et al. 2008; Craig et al. 2008).

Closely tied to a firm's choice of generic strategy, and thus the second group-defining criterion in the current study, is the concept of planning. It is through the process of planning that the decision regarding generic strategy is made and/or carried out. Whether formal or informal planning is the best fit for stable versus unstable market environments, is a classic debate in management research (Ansoff 1994; Ansoff 1991; Mintzberg 1991; Mintzberg 1994a, and 1994b). Brews and Hunt (1999), in an effort to put the debate to rest, reported on three studies that encapsulated other works by either reviewing multiple studies or conducting a meta-analysis (Boyd 1991; Miller and Cardinal 1994; Schwenk and Shrader 1993), and stated the inconclusive evidence in these articles was the foundation for Mintzberg (1991) favoring the learning school, or emergent style of planning. The debate has continued in recent publications (e.g., Rudd et al. 2008). This sustained effort clearly illustrates the importance of considering planning when profiling firms.

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Although the current study identifies like groups based on generic strategy and planning style, other factors help to more fully explain the competitive landscape among the resultant strategic groups. The firm characteristics of concern for this study include planning flexibility, perception of industry volatility (dynamism), strategic emphasis on innovation and innovation itself. In addition, firm size and age are considered as economies of scale and experience may play a role in firm performance. Each characteristic is discussed in turn below.

As noted in articles like Brews and Hunt (1999), a counter argument to formalized planning is the need for a firm to stay flexible in the direction they are willing to take as a result of strategic planning, especially when the business environment is turbulent (Dreyer and Grønhaug 2004). Specifically, Rudd, et al. (2008, 99) define this flexibility as "…the extent to which new and alternative decisions are generated and considered in strategic planning, allowing for positive organizational change and adaptation to environmental turbulence." The need for flexibility in turbulent environments was first empirically demonstrated by Kukalis (1989). Since then, many studies have looked at the role of flexibility in a firm's success (e.g. Barringer and Bluedorn 1999; Rudd et al. 2008; Zahra et al. 2008).

Given the arguments for flexibility, it stands to reason that the firm's perception of volatility or dynamism in their business environment is important to consider. Slater and Narver (1994) found that this turbulence can reduce a firm's performance and in turn reduce the organizational slack enjoyed by a firm. Zahra, Neubaum, and Huse (1997) measured how export performance was affected by a firm's perception of industry-wide changes in advertising, manufacturing, product, and technological innovations. How a firm sees stability in their industry and their approach to planning is clearly intertwined.

Beyond planning, flexibility and dynamism, the extant literature identifies innovation as a significant factor in a firm's performance. There are primarily two facets to innovation: the strategic emphasis on innovation and practice of innovation. The strategic emphasis on innovation has been separated out as an important facet of the firm's strategy (Davis et al. 2002). As part of a strategic focus, innovativeness then would be part of the mindset or culture of the organization. It is this corporate culture of innovation that Hurley and Hult (1998) argue gives a firm a distinct advantage in innovating. Several studies have investigated the result of this process – innovation. Medina, et al. (2005) and Miller and Friesen (1982) looked at what leads firms to innovate, Dougherty (1992) looked at what impact innovation has on firms, and Baker and Sinkula (2005) looked at the interaction of innovation with other factors to explain firm performance.

In addition to the factors noted above, a firm's size and experience set may influence their ability and sophistication of planning. Pelham (1999), for example, noted that small and large firms are not on level playing fields with respect to performance. Many explanations exist, in particular the economies of scale that play a factor in cost structures, access to larger customers, and production knowledge. Swan and Newell (1995) note that smaller firms, especially micro enterprises, certainly have a different set of resources. Of course, the small firm enjoys nimbleness over its larger competitors. With a larger firm, the possibility of organizational slack increases, which can have various impacts on firms (Cyert and March 1963; Fama 1980; Jensen and Meckling 1976; Pfeffer and Salancik 1978). Size of a company is often positively correlated with experience and/or age of the firm. As a firm gains experience, it is expected that they are

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learning and growing in their capabilities. The power of learning with respect to a firm's long-term performance has been well documented (Fugate et al. 2009; Senge 1990; Sinkula 1994; Wang 2008).

Data and Methods

Data for this study were collected via a mail survey of the food processing industry. A group of 4,341 food companies from across the United States was randomly drawn from a national database maintained by Dun and Bradstreet. To be included in the study, the respondent had to be in a knowledgeable management position such as CEO or owner (Floyd and Wooldridge 1994). The Salant and Dillman (1994) recommended approach for data collection for mail surveys was implemented through two waves of mailings. After removing 461 respondents due to reasons such as an incorrect address, the respondent asking to be removed from our mailing list owing to company policy, or did not meet the top management team position criterion, 360 surveys were received for a response rate of 9.3%. Of those, 324 responses completed all the relevant questions. The response rate is comparable to "…10 to 12 percent typical for mailed surveys to top executives…" (Hambrick et al. 1993), and is favorably comparable to other food industry oriented surveys (Kinsey et al. 2007).

Because of Armstrong and Overton's (1977) finding that late respondents often possess firm characteristics which were similar to those of non-respondents, non-response bias was tested by comparing a random sub-sample of fifty firms from the early respondents (Survey Wave 1) versus a random sub-sample of fifty firms from the late respondents (Survey Wave 2). No statistically significant differences were found between the two sub-samples on the studied constructs. Thus, all 324 responses were included in the analysis.

The survey was constructed to obtain respondents' answers to multiple questions per construct or latent variable. These constructs include: planning intensity (PLAN), three measures of competitive strategy (overall least cost (OLC), product differentiation (PROD), customer satisfaction (CUST)), strategic flexibility (FLEX), dynamism (DYN), strategic emphasis on innovation (STINOV), innovation (INOV), and three measures of firm performance (PERF, GROWTH, PROFIT). In addition, number of employees (EMP) and firm age (AGE) were measured as proxies for size and experience. The relevant parts of the questionnaire are presented in the Appendix. Where appropriate, the language of each established scale was modified to fit the food industry. Select statistics for each of the scales are provided in Table 1.

Table 1. Descriptive Statistic and Cronbach's Alpha (n = 324)

Scale	Mean[a]	S.D.	Alpha
PLAN	2.98	.79	0.85
OLC	2.82	.89	0.70
PROD	3.42	.82	0.75
CUST	3.84	.73	0.66
FLEX	3.62	.73	0.86
DYN	2.84	.76	0.82
STINOV	3.07	.74	0.78
INOV	3.13	.99	0.74
PERF	2.46	.81	0.84
GROWTH	2.88	1.00	0.76
PROFIT	2.99	1.14	0.95

[a]Measures were summated and then divided by the number of items for each respective measure.

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The group-defining criteria scales are both a five-point scale anchored by "Not at All" and "To an Extreme Extent." A foundational study in measuring a firm's planning effort is Brews and Hunt (1999). The current study, for reasons of parsimony and multicollinearity, condensed the Brews and Hunt's (1999) Likert scales down to a four item scale that collectively measured the formality of the planning objectives (ends) and processes (means). The reduction of scale items did not hinder the reliability of this scale ($\alpha>0.65$). Generic strategy, the second set of group-defining criteria, is measured by a 15 item scale that was adapted from Dess and Davis (1984) by Davis, Dibrell and Janz (2002).

The scales used to measure the other factors noted in the literature review are also well established scales. Planning flexibility (FLEX), which measures how smoothly a firm's strategic plan reacts to changes in the environment, was a six item scale adopted from Barringer and Bluedorn (1999). A six item scale from Zahra, Neubaum, and Huse (1997) was used to measure perceived industry-wide changes in advertising, manufacturing, product, and technological innovations – or dynamism (DYN). The level of strategic emphasis on innovation (STINOV) was measured by a scale formulated by Dess and Davis (1984). This scale is made up of a subset of the competitive strategies scale. It was chosen as it focuses on a firm's strategic emphasis on innovation and does not delineate between product and process innovations. Finally, a three item scale measuring a firm's R&D, product, and marketing innovations compared to industry norms (INOV) was taken from Miller and Friesen (1982).

Proxies were used to represent the size of the firm and its experience set. As the food industry is a fairly labor intensive industry, the number of full-time employees (EMP) was selected to represent the size of a firm. The number of employees was identified on a 6-point scale ranging from less than 5 to greater than 500. Using firm age as a proxy for experience, the number of years the firm has been in operation (AGE) was assessed on a 6-point scale ranging from less than 3 years to more than 30 years.

Although it is not the objective of this study to determine the causation of performance but rather profile strategic groups of firms, it is imperative to note if the groups of firms differ with respect to performance. As publicly available financial performance data (archival or secondary forms) do not exist for the privately held firms, the approach recommended by Dess and Robinson (1984) and other scholars in this area (e.g. Davis et al. 2002; Matsuno and Mentzer 2000) was executed. Dess and Robinson (1984) found that self-reported data is comparable to archival sources of financial results and suggest this method is appropriate for studies of firms for which archival sources of financial data are unavailable. Firms in this study identified how their financial performance compared to competitors in the industry using quintiles. This five item scale is a broad measure of overall firm performance (PERF); and then two sub-constructs with two and three items, respectively, were used to measure growth (GROWTH) and profit (PROFIT) of the firm.

The items associated with a construct were averaged for each respondent to obtain a single score. This was done for each of the multi-item scales and these mean scales were used in the analysis. The two-step clustering method in SPSS 17 was utilized for the cluster analysis because it allows for mixed variable types and a larger dataset (Norušis 2008). The method gets its name from the use of two distinct steps. The first step is developing preclusters and the second is the

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hierarchical clustering of the preclusters. Despite checking for outliers using bi-variate and multivariate methods, the procedure was allowed to identify outliers in the clustering process. In addition, the Schwarz Bayesian Criterion was used for the information criterion, the continuous variables were standardized, and the number of clusters was not fixed. The log-likelihood estimation process was used to calculate the clusters.

When possible, an ANOVA was used to test for homogeneity between groups for a given variable. However, when the assumption of variance homogeneity is violated, which was tested for by using the Levene Statistic, the Welch F was used to compare groups of means for homogeneity. When homogeneity between groups failed, paired comparisons were done using one of two methods: Tukey's test when variances were homogeneous and Tamhane's T2 test when they were not.

Results

Table 2 shows the dispersion of cases based on the cluster analysis. The analysis identified two outliers and 38 cases were omitted due to list wise deletion of missing data. Cluster 1 has the largest percentage of observations (41%) with the remaining two clusters being of similar size.

Table 2. Cluster Descriptive Statistics

		Total Observations	Percentage of Combined	Percentage of Total
Cluster	1	148	46.00%	41.10%
	2	91	28.30%	25.30%
	3	81	25.20%	22.50%
	Outliers	2	0.60%	0.60%
	Combined	322	100.00%	89.40%
	Excluded Cases	38		10.60%
	Total	**360**		**100.00%**

For each of the three clusters –descriptive statistics for the mean scales of interest in this study, including the variables used in determining the clusters –are provided in Table 3. Given the nature of the scales, an interpretation of the absolute score is not meaningful, but rather a relative comparison is the focus. A casual observation shows that all three clusters have similar emphasis on customers, and that variable has the highest mean of the competitive strategy scales for all three clusters. Beyond this similarity, there are substantial differences between clusters in the way they plan and the competitive strategies emphasized. Cluster 2 predominantly has the lowest average of the three clusters. Between Clusters 1 and 3, Cluster 3 conducts more planning and focuses more on providing products at a low cost, whereas Cluster 1 has a stronger emphasis on product differentiation.

The clusters also fall into similar patterns with the other variables of interest. Cluster 2 again has the lowest scores with respect to flexibility, strategic innovation, and innovation, as well as all the performance variables. While Cluster 3 has the highest score for flexibility and performance,

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Cluster 1 has the highest for strategic innovation and innovation. All three clusters have similar results for how tumultuous they see their industry (dynamism).

Table 3. Mean and Standard Deviation of Strategy and Performance Variables

	Cluster		
	1	2	3
PLAN	2.97	2.72	3.30
	(0.78)	(0.76)	(0.73)
OLC	2.83	2.50	3.17
	(0.87)	(0.79)	0.92)
PROD	3.67	3.02	3.40
	(0.68)	(0.94)	(0.76)
CUST	3.88	3.71	3.89
	(0.76)	(0.66)	(0.75)
FLEX	3.66	3.44	3.75
	(0.73)	(0.79)	(0.63)
DYN	2.81	2.86	2.86
	(0.75)	(0.78)	(0.78)
STINOV	3.24	2.73	3.15
	(0.63)	(0.74)	(0.79)
INOV	3.37	2.71	3.15
	(0.94)	(0.94)	(1.01)
PERF	2.41	2.23	2.79
	(0.79)	(0.75)	(0.79)
GROWTH	2.86	2.46	3.36
	(0.97)	(0.86)	(0.98)
PROFIT	2.93	2.78	3.31
	(1.15)	(1.10)	(1.12)

In addition to the scales, the employee size classification, age and main sales channel (e.g. selling into retail, restaurants, and industrial distribution channels) are compared between clusters. Figure 1 shows how the makeup of these clusters differs with respect to the number of employees. Although clusters 1 and 2 are very similar, Cluster 1 does have firms with 50-99 employees and Cluster 2 has none. Cluster 3 clearly is comprised of the larger firms. Figure 2 depicts the distribution of firm ages. Cluster 1 is clearly the youngest group and Cluster 2 the oldest. However, Cluster 3 tends toward the older category. Table 4 shows how the average percentage of sales by market channel compares across clusters. The means are quite similar between clusters across the various market channels of retail, food service, industrial and other. Statistical tests (ANOVA, Welch, Tamhane), indicate that there is no statistical difference of mean sales percentage by market channel across the clusters.

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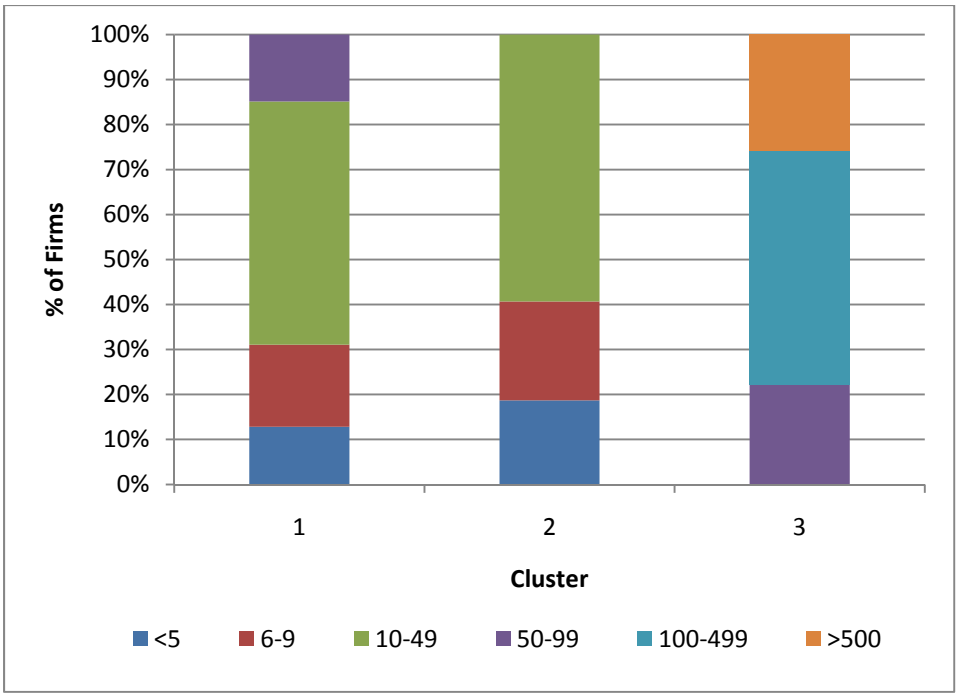

Figure 1. Number of Employees by Cluster

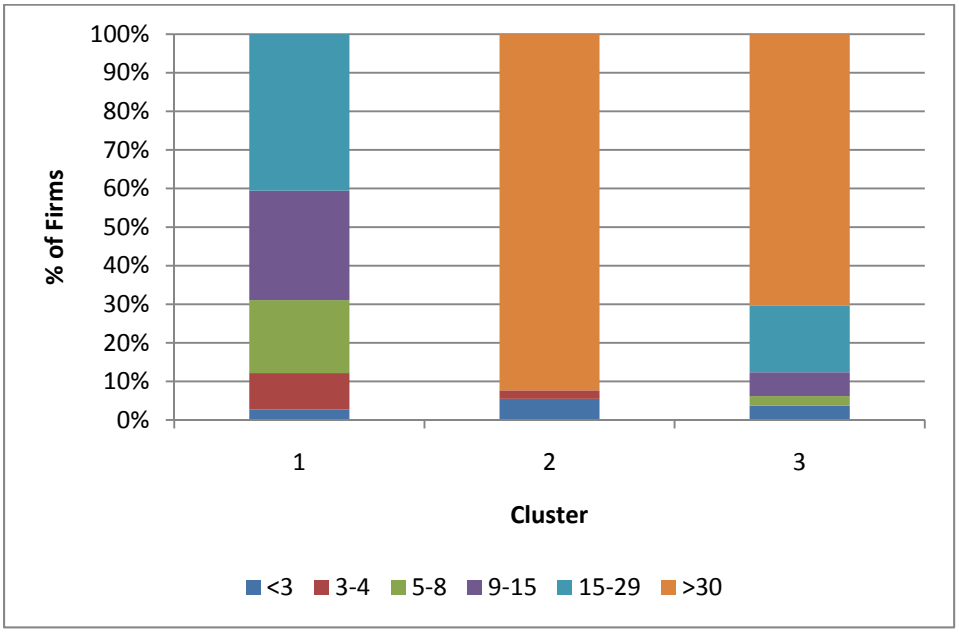

Figure 2. Firm Age Cluster Profile

Table 4. Average Percentage of Sales: Market Channel by Cluster

Cluster	Retail	Food Service	Industrial	Other
1	45.1	26.7	12.9	15.3
2	56.1	20.4	14.5	9.0
3	45.2	26.6	18.7	9.5

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The differences noted above between clusters are made by comparing the relative values. For more meaningful comparisons, the mean scales are tested for statistical differences to validate the preliminary results about each cluster's primary strategic focus, planning effort and other factors. In order to utilize an ANOVA test, the variances must be homogeneous between clusters. The Levene Statistic Test indicated PROD and STINOV did not have homogeneous variances across clusters. For these variables, the Welch Test statistic was utilized. These tests revealed that statistical differences in means do exist between clusters for PLAN, OLC, PROD, FLEX, STINOV, INOV, PERF, GROWTH, and PROFIT (Table 5). The two variables that had no statistical differences were CUST and DYN, meaning the firms view customer orientation and the dynamic nature of their industry identically across clusters.

Table 5. ANOVA and Welch Test Results for Mean Scales

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
PLAN	Between Groups	14.29	2	7.15	12.32	0.000
	Within Groups	183.82	317	0.58		
	Total	**198.12**	**319**			
OLC	Between Groups	19.31	2	9.65	12.99	0.000
	Within Groups	235.55	317	0.74		
	Total	**254.85**	**319**			
CUST	Between Groups	1.99	2	0.99	1.88	0.155
	Within Groups	167.79	317	0.53		
	Total	**169.78**	**319**			
FLEX	Between Groups	4.51	2	2.25	4.31	0.014
	Within Groups	163.29	312	0.52		
	Total	**167.80**	**314**			
DYN	Between Groups	0.21	2	0.10	0.18	0.838
	Within Groups	180.75	308	0.59		
	Total	**180.96**	**310**			
INOV	Between Groups	23.59	2	11.80	12.88	0.000
	Within Groups	272.97	298	0.92		
	Total	**296.56**	**300**			
PERF	Between Groups	13.50	2	6.75	11.09	0.000
	Within Groups	178.40	293	0.61		
	Total	**191.90**	**295**			
GROWTH	Between Groups	33.17	2	16.59	18.68	0.000
	Within Groups	264.61	298	0.89		
	Total	**297.79**	**300**			
PROFIT	Between Groups	12.34	2	6.17	4.85	0.008
	Within Groups	375.13	295	1.27		
	Total	**387.47**	**297**			

	Welch Robust Tests of Equality of Means				
	Test	Statistic[a]	df1	df2	Sig.
PROD	Welch	16.85	2	169.81	0.000
STINOV	Welch	14.90	2	170.07	0.000

To determine which clusters have statistically different means per variable, two post hoc tests are used. Tukey is a post hoc test that uses pairwise comparisons of the means and t-tests to identify significant differences. Tamhane is another post hoc test similar to the Tukey test that is used when group variances or sample sizes are unequal. The results of these tests at a 5% significance

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level are presented in Table 6 (CUST and DYN were omitted from this table as the previous results showed there was no significant difference between clusters).

Table 6. Pairwise Comparisons between Clusters for Mean Scales

	Cluster Comparison*			
	1 vs. 2	1 vs. 3	2 vs. 3	Test
PLAN	>	<	<	Tukey
OLC	>	<	<	Tukey
PROD	>	>	<	Tamhane
FLEX			<	Tukey
STINOV	>		<	Tamhane
INOV	>		<	Tukey
PERF		<	<	Tukey
GROWTH	>	<	<	Tukey
PROFIT		<	<	Tukey

*****Inequalities within the table indicate relative size of means between cluster means and only appear when the pair is statistically different at a 5% level.

The respective mean values of planning, overall least cost, and product differentiation strategies are statistically significantly different across the three clusters. The values for the three decision criteria (planning, overall least cost, product differentiation) have statistically the lowest mean values in Cluster 2. This indicates that firms in this cluster do not have an outstanding competitive strategy (i.e. beyond the minimum competency indicated by the consistent score for customer focus – CUST), nor as intensive a planning focus compared to the other clusters. The primary strategic focus of Cluster 1 is on product development; Cluster 3 has strategic foci on planning and overall least cost (OLC). In reporting these differences, it is important to note that each of the three clusters has a strong customer strategic focus (see Table 1).

The other factors considered in this study but not used in determining clusters include dynamism, flexibility and innovation. All three are measurably different between clusters. Cluster 2 had the lowest means for flexibility, dynamism, strategic innovation, and innovation. The differences between Cluster 2 and the other two clusters proved to be statistically significant for strategic innovation and innovation. In addition, Cluster 2 had a statistically significantly lower score for flexibility than Cluster 3. The two variables of STINOV and INOV are significantly different between Clusters 1 and 2. In other words, Cluster 1 has a greater degree of strategic innovation and innovation than Cluster 2.

These findings indicate that cluster analysis has stratified the data into three distinct arrays. The measures of statistically significant variables are summarized below and depicted graphically in Figure 3. Cluster 3's high performance levels coincide with larger, older firms that pay the most attention to business strategy planning, are most committed to overall least cost competitive strategy, and have the greatest flexibility of all the clusters. This cluster group could be classified as older, larger, aggressive firms. Cluster 2's low performance levels on the other hand relate to smaller firms that pay little attention to strategic planning, have the lowest focus on any competitive strategy, and have the lowest flexibility and innovation scores. This cluster of firms is most aptly classified as lifestyle firms. Lifestyle firms focus on maintaining their quality of life, looking to grow only to keep ahead of inflation, and subsequently putting the minimum

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required effort into strategic planning. Finally, Cluster 1 firms, although presenting mediocre performance levels relative to Cluster 3 firms, are younger firms that pay moderate attention to planning and are oriented the most to product differentiation and innovation. They can be classified as young, dynamic, up and coming firms with novel products.

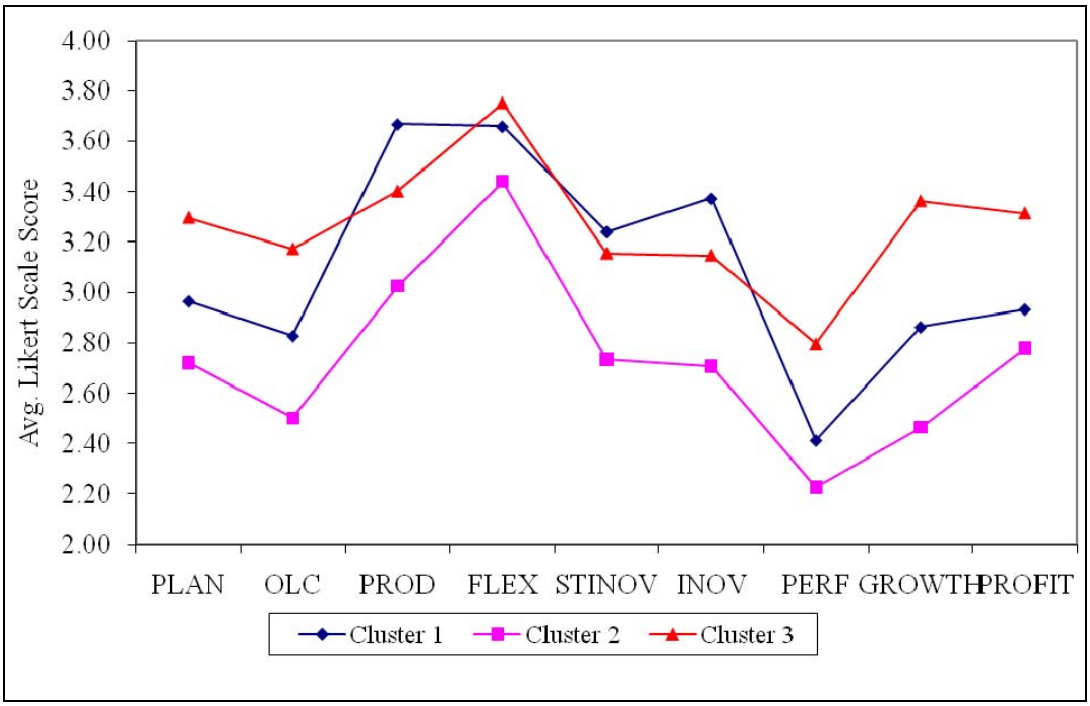

Figure 3. Cluster Profiles for Statistically Different Measures

Discussion and Conclusions

Given the focus of this study is on food manufacturers, generalization to all manufacturing is not possible. However, the findings from this study provide insight into the competitive landscape of the food manufacturing industry, and these lessons may be applicable to other mature industries like the food processing industry. Our specific results indicate that all of the firms offer a minimum level of customer service, leading to the conclusion that some level of focus on customer needs and desires is a necessary strategy for success – and is a minimum competency for competition in the industry.

Further analysis separated the food businesses into three distinct groups which we describe as a.) Differentiators (Cluster 1) – smaller firms with a differentiated but good focus and attention to strategy and planning – "slow and steady wins their race"; b.) Lifestylers (Cluster 2) – firms along for the ride, tending to "do as we always have"; and, c.) High performers (Cluster 3) – larger, more aggressive firms which focus on low costs and have the most formal planning among firms in the study.
Management implications that follow from the findings of this study are: a.) smaller, newer food companies, may find it productive to differentiate and "dig-in for the long haul;" b.) larger food firms, many "firing on all cylinders" (from a growth and profitability standpoint), may find their

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greatest threat comes from within their group; c.) Lifestyler food companies should not expect much from overall growth, performance and profit, but can expect to be content with the "status quo."

"One size fits all" does not apply when it comes to the planning and strategic choice of food businesses. The analysis in this study found three distinct types of firms. First, there is the Lifestyler firm (Cluster 2) that is focused on making a modest "living," usually by focusing on a fringe market. Second, there is the High Performer firm. These are companies that tend to be larger and focus on multiple objectives. Finally, there is the Differentiator firm, the one that can match the High Performers in some categories, but which lack the economies of scale usually associated with the High Performers. What sets them apart is their ability to differentiate their products and services. For these firms, there arises the potential for an exit strategy to sell their proven differentiated product to a High Performer.

Each type of company has their strength, but they also face unique challenges. For example, the High Performer's approach of multiple foci can lead to greater performance as measured by GROWTH and PROFIT; however, this approach requires sufficient size and access to resources to be successful. Even with access to resources, these multiple foci can result in being distracted and subsequently being leapfrogged by other High-Performers. While the Differentiator can match the larger High Performer with respect to capabilities of flexibility, strategic innovation and innovation, if the company wants to pursue growth they must rely on a differentiation strategy. Finally, while the Lifestyler can make a modest "living," they are always at risk. Depending on the loyalty of their customer base, they could be displaced by the more aggressive High Performers or Differentiators.

As a result of this study, managers of food companies better understand their competitive environment, and thus are more informed when they themselves conduct planning and choose their strategy. Managers in other industries could also take lessons in how to consider their industry's competitive environment based on the process presented in this study. Of course, an explicit study within their industry would be needed for exact knowledge, but at the very least the process laid out here is food for thought.

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Appendix

STRATEGIC PLANNING (PLAN) – Brews and Hunt (1999)

1. When formulating strategy **in your business**, how many OBJECTIVES are usually specified?
___None ___Very few ___Some ___Quite a few ___A large number

Please indicate the extent your business emphasizes these activities as part of your *planning process*.	**Not at all**		**To a moderate extent**		**To an extreme extent**
2. To what degree are the objectives that result from the strategy formation process formalized and documented?	1	2	3	4	5
3. To what degree are strategy implementation plans developed as a result of the strategy formation process?	1	2	3	4	5
4. How closely are your business' strategy implementation plans followed as your company attempts to implement the strategy objectives?	1	2	3	4	5

STRATEGY (OLC, PROD, CUST)* Davis, Dibrell and Janz (2002)

Please indicate the extent your business emphasizes these activities as part of your *competitive strategy*.	**Not at all**		**To a moderate extent**		**To an extreme extent**
1. Developing new products	1	2	3	4	5
2. Upgrading existing products' appearance and performance	1	2	3	4	5
3. Producing specialty products	1	2	3	4	5
4. Emphasizing products for high price market segments	1	2	3	4	5
5. Higher production efficiency than competitors	1	2	3	4	5
6. Maintaining low levels of inventory	1	2	3	4	5
7. Investing in new R&D facilities to gain a competitive advantage	1	2	3	4	5
8. Customer service (including after sales support)	1	2	3	4	5
9. Effective control of channels of distribution	1	2	3	4	5
10. Quick delivery and immediate response to customer orders	1	2	3	4	5
11. Tight control of selling/general/administrative expenses	1	2	3	4	5
12. Innovation in marketing techniques	1	2	3	4	5
13. Innovation in production processes	1	2	3	4	5
14. Procurement of raw materials	1	2	3	4	5
15. Higher quality standards than competitors	1	2	3	4	5

* OLC – items 5, 7, & 13; PROD – items 1, 2, 3, & 4; CUST – items 8, 9, & 10
items 6, 11, 12, 14, & 15 failed to load properly using confirmatory factor analysis

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STRATEGIC FLEXIBILITY (FLEX) – Barringer and Bluedorn (1999)

Please indicate your evaluation of how flexible your business's strategic planning process could be in response to the following events.	**Not at All Flexible**				**Very Flexible**
1. The emergence of a new technology that adversely affects your existing business.	1	2	3	4	5
2. Opportunistic shifts in economic conditions.	1	2	3	4	5
3. The market entry of new competition.	1	2	3	4	5
4. Adverse changes in government regulations.	1	2	3	4	5
5. Opportunistic shifts in customer needs and preferences.	1	2	3	4	5
6. The emergence of an unexpected market opportunity.	1	2	3	4	5

DYNAMISM (DYN) – Zahra, Neubaum and Huse (1997)

Please indicate your evaluation of CHANGE in your industry for each of the following.	**Very Little**		**Moderate**		**Very High**
1. Extent of industry-wide spending on advertising has been	1	2	3	4	5
2. Extent of industry-wide promotional activities has been	1	2	3	4	5
3. Extent of overall innovations has been	1	2	3	4	5
4. Extent of manufacturing innovations in your industry has been	1	2	3	4	5
5. Extent of product innovations has been	1	2	3	4	5
6. Extent of technological innovations has been	1	2	3	4	5

INNOVATION (INOV) – Miller and Friesen (1982)

Please indicate the choice that best approximates how your business compares with other companies in your industry in relation to innovation.

1.	There exists a very strong emphasis on marketing of tried and true product/services	1	2	3	4	5	There exists a very strong emphasis on R&D, technological leadership, and innovations
2.	No new lines of products, services, or programs were introduced during the past three years	1	2	3	4	5	More than half of our product lines or services were introduced during the past three years
3.	Changes in product lines have been minor over the last three years	1	2	3	4	5	Changes in product lines have been major over the last three years

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STRATEGIC INNOVATION (STINOV) – Dess and Davis (1984)

Please indicate the extent your business emphasizes these activities as part of your *competitive strategy*.	**Not at all**		**To a moderate extent**		**To an extreme extent**
1. Developing new products	1	2	3	4	5
2. Upgrading existing products' appearance and performance	1	2	3	4	5
3. Producing specialty products	1	2	3	4	5
4. Investing in new R&D facilities to gain a competitive advantage	1	2	3	4	5
5. Innovation in marketing techniques	1	2	3	4	5
6. Innovation in production processes	1	2	3	4	5

PERFORMANCE (PERF, GROWTH, PROFIT)* – Dess and Robinson (1984)

Please indicate the category that in your opinion best approximates how your business compares with other competitors in your industry over the most recent year.	**Bottom 20%**	**Next Lowest 20%**	**Middle 20%**	**Next Highest 20%**	**Top 20%**
1. Total sales growth	1	2	3	4	5
2. R&D as a percentage of sales	1	2	3	4	5
3. Total market share growth	1	2	3	4	5
4. After-tax return on total sales	1	2	3	4	5
5. After-tax return on total assets	1	2	3	4	5

* PERF – items 1 – 5; GROWTH – items 1 – 3; PROFIT – items 4 & 5

FIRM SIZE - EMPLOYEE NUMBERS (EMP)

How many full-time employees does your business employ?

___ <5 ___ 6-9 ___ 10-49 ___ 50-99 ___ 100-499 ___ >500

EXPERIENCE - FIRM AGE (AGE)

How many years has your business been in operation?

___ <3 years ___ 3-4 years ___ 5-8 years ___ 9-15 years ___ 15-29 years ___ >30 years

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