

Staff Paper

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Agribusiness Research

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Focus Groups as a Useful Approach to Agribusiness Research¹

James Sterns and Donald Ricks²

Introduction

As the agricultural economics profession increasingly strives to find relevant and useful approaches for addressing a broad array of research questions, particularly in terms of agribusiness research, there will be a growing need to adopt a wide set of research methods and methodologies. Historical research strategies typically emphasized by agricultural economists have focused primarily on surveys, archival/secondary data and econometrics. However, these approaches are, at times, limited in their applicability and scope relative to some of the research questions that have the greatest priority for agribusiness researchers and their clientele. Some of the research methods now being more widely used by agribusiness-oriented agricultural economists are more qualitative, as is already evident with a growing acceptance of case studies within the profession. This paper discusses an additional qualitative approach that has substantial potential for agribusiness research — focus groups.

Objectives

The following specific objectives are in support of the paper's overall goal of demonstrating that focus groups are a viable approach to research in agribusiness. The specific objectives are to:

(1) discuss the overall approach of focus group research, its limitations and the intellectual rationale supporting the use of focus groups as a research approach for agribusiness, (2) highlight several key issues concerning focus group research methods, and (3) provide an empirical example of the use of focus groups. This empirical example demonstrates how university researchers, in collaboration with the

¹An earlier draft of this paper was presented at the 1999 WCC-72 annual meeting, June 27-29, 1999, Las Vegas, Nevada. WCC-72 is the USDA-sponsored regional coordinating committee on Agribusiness Research and Education Emphasizing Competitiveness and Profitability.

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leadership of a regional agricultural industry, used focus groups to help identify potential marketing and strategic plans that more closely target changing consumer preferences.

To address these objectives, the paper will provide a brief overview of the literature on focus group methods, outline how these methods could be adopted to the specific needs and interests of agribusiness researchers, and demonstrate how focus groups can be an important research method when used in combination with other qualitative and quantitative research methods. The paper also will use the empirical example to show the types of information that can be attained through focus groups and the usefulness of this type of information in applied, agribusiness research.

Focus Groups as a General Research Approach

Focus groups are widely used today in business market research studies. This approach is commonly used by large manufacturers of branded products and many other business firms. A major contribution to the early development of this approach was the work of Robert Merton and his colleagues during the mid-1940s (though the sociologist Paul Lazarsfeld has been referred to as “the putative father of focus groups”).³ Since then, focus groups have become one of the dominant methods used in market research to assess consumer attitudes and preferences. As Krueger notes, “focus group interviews are widely accepted within marketing research because they produce believable results at a reasonable cost (p. 8).” He also notes that focus groups are “growing in popularity among other information seekers, such as social scientists, evaluators, planners, and educators (p. 8).”

Carey suggests that the social sciences have come to broadly conceptualize focus groups as an approach “using a semi-structured group session, moderated by a group leader, held in an informal setting, with the purpose of collecting information on a designated topic (p. 226).” Carey further notes that the “information” which focus groups are particularly well-suited to gather concerns the personal

³Templeton, p. 49.

experiences and beliefs of the group participants. Krueger concurs, noting that focus groups are “a particularly appropriate procedure to use when the goal is to explain how people regard an experience, idea, or event (p. 8).”

Both Auel, and Morgan and Krueger list specific advantages of focus group research. Some of these advantages include (p. 8, and pp. 10-18, respectively; *emphasis in the original*):

Group interactions facilitate the participants’ ability to articulate their motivations, feelings, attitudes, and opinions, particularly on research topics which they may not have previously had any need to formally, consciously express (e.g., consumers may never have consciously thought about why they make the purchase decisions that they do).

A wide range of information can be generated in a *short time*.

The technique helps identify, in terms of a research question, the degree of consensus, and/or the range of opinions or experiences that might exist in a target audience.

The flexible format allows the facilitator to *explore related but unanticipated topics* or issues as they arise in the discussion.

The focus group setting can help bridge gaps that may exist between professionals and their target audiences (e.g., gaps in vocabulary, language, culture, regions and ways of thinking).

The group setting can potentially provide a *secure atmosphere* in which participants can spontaneously express their ideas.

Participants *do not feel pressured* to respond to every question asked.

People generally *enjoy being asked to discuss* their experiences and share their ideas in a receptive group setting.

The group exerts a certain degree of control over participants which can dissuade them from giving dishonest or false answers.

The technique fosters a *flexible and fluid communication process*.

These authors also list several of the specific disadvantages of focus group research. These include (ibid):

Interviews are *not representative* of the target population and results cannot be treated statistically.

Participants have a *tendency to agree* with the opinions expressed by others in the group rather than to express minority opinions (although Morgan and Krueger argue that a good moderator can avoid this pit-fall by creating an open and permissive atmosphere in which each person feels free to share her or his point of view).

More articulate group members can dominate the discussion.

The analysis and interpretation of findings are more subjective than in the case of survey data.

Jeffers adds an additional disadvantage of focus groups (p. 58):

The measurement of purchase intentions and preferences within a focus group setting assumes that there is a direct, corresponding relationship between what people say they do and what they actually do. In fact, there is no guarantee that this is the case.

Recognizing these advantages and disadvantages, agribusiness researchers can selectively use focus groups along with other qualitative and quantitative methods to meet their research needs and the needs of their clientele.

Focus Groups as an Approach to Agribusiness Research and Analysis

As more efforts by agricultural economists are targeted towards understanding the full vertical spectrum of agricultural and food subsectors (i.e., a “plow to plate” perspective), additional research methods like focus groups are being employed in order to more fully address the complexities of this expanded research agenda. In particular, focus groups can be used:

1. As one component of a broad market research program designed to help agribusinesses understand their customers’ needs and preferences. Other components could include mail surveys, telephone interviews, analysis of archival and secondary data and consumer sensory tests (e.g., taste and visual tests).
2. As a tool to build an understanding of consumers’ (or other customers’) behavior, preferences and perceptions, and their evaluation and decision making processes in regard to food products and services.
3. As a way to clarify a potential research problem area and to more fully develop the full context and nature of a perceived problem or research topic.

4. As a tool to evaluate and explain the reactions to an agricultural product, service or promotion, especially in terms of a new product or service or a new advertising campaign.
5. As a framework to lead discussions among industry leaders within an agricultural subsector. Such discussions can be used to assess the competitive position of the subsector and identify potential strategies for improving this market position.

For example, focus groups can be used by agribusiness researchers to determine how consumers assess the quality and desirability of a food product. During a group interview, a moderator can encourage participants to elaborate on the specific product characteristics, words and images that they associate with the product, and to explain in detail their motivations for purchasing or not purchasing a particular food product or brand of food product. This information can then be used by members of an agricultural commodity industry to better promote their products and/or deliver products that are more closely aligned with consumer preferences. Food processors may re-package or develop new products to meet identified, yet unmet, consumer demand; commodity organizations can incorporate focus group findings into their promotions and advertising programs to better target their intended consumer audiences; and, individual producers/growers may be able to identify niche markets for their products.

In general, focus groups offer agribusiness researchers an effective approach for enriching their understanding of the behavior of consumers, producers and/or other economic/market participants. The approach goes beyond documenting actions, choices or even the perceptions of these participants. A fundamental objective of focus groups is to determine *why* consumers and other market participants act, choose, and perceive as they do, and to understand more about the *complexity of factors* that influence the key behavior which is being researched.

Research Methods

In the most general sense, focus groups are no different than most other forms of social science inquiry. The same basic steps are needed — planning, implementation, analysis, and presentation/reporting of findings. Once an agribusiness researcher decides that conducting a set of focus

groups would address the methodological needs of a research project, he/she will quickly find in the literature numerous examples of how to work through these four steps (e.g., Knodel, 1993, Krueger, 1994, Morgan, 1997, and Stewart and Shamdasani, 1990, for guides to social science research applications of focus groups, Greenbaum, 1998 and Templeton, 1987, for guides emphasizing the use of focus groups in market research, and Aube, 1994, for a guide to using focus groups in settings more common in developing countries).

This paper will not try to re-invent, nor repeat, the basics of conducting focus groups as are outlined by these authors. However, there are several key issues related to focus group methods that merit highlighting. These include how to develop and use a discussion guide, determining the composition of the focus group, the characteristics of an effective moderator, and the types of analysis that are used.

Discussion Guides: The “discussion” or “group interview” guide is a set of key topics and questions which are to be used by a moderator during the focus group sessions. The guide is the equivalent of a questionnaire in survey work. However, its design and use differ considerably. In particular, focus group discussion guides are, by design, much more flexible in how question areas are introduced and discussed. The order and level of detail in which each question area is covered can vary considerably from focus group to focus group despite the fact that the same discussion guide is being used in each session. Such a discussion guide typically will only be comprised of open-ended questions, rather than yes/no and demographic questions often used in survey questionnaires. The open-ended questions are particularly useful in focus groups because they facilitate comprehensive discussions that reveal personal attitudes, behaviors and preferences.

Templeton suggests that discussion guides can be in one of two formats — a skeleton outline or a full narrative. A skeleton outline lists a set of general question areas to be covered during each focus

group session, as well as specific “probing” follow-up questions which can be used to facilitate conversation and more fully explore each question area. The full narrative is used to “set a stage” in which a story is told and the focus group participants, through their reactions to the story, reveal their preferences, attitudes, opinions and perceptions.⁴ Templeton generally prefers the narrative, given that it permits the researcher to (in her words) “make the familiar strange.” By this Templeton is suggesting that, as noted above, many consumers do not consciously think about every purchasing decision they make. Many of these purchases have become routine habits. A narrative is one approach to get focus group participants to re-visit the long-forgotten or sub-conscious decision processes that influence their behavior.

Focus Group Composition: A focus group generally is designed to have roughly 7 to 14 participants, and a research project using focus groups will generally conduct three or more focus group interviews, with a different set of participants in each focus group. The actual composition of each focus group (i.e., how are potential participants identified, screened and selected) is guided by the research topic under study and the interest of the clientele for whom the research results are intended. Potential participants can be screened by specific demographic traits (e.g., gender, age, income or education level) and/or by their behavior patterns (e.g., do they purchase a particular product, do they use a particular service). The goal is to create a focus group in which the level of homogeneity/heterogeneity of participants is in some way balanced. A group needs to be homogeneous enough to encourage full participation but heterogeneous enough to generate a range of opinions and perceptions.

The moderator: The interview moderator plays a critical role in the focus group process. As Morgan and Krueger note, in focus group interviews, the moderator becomes the “data collection

⁴For example, a story may begin, “You have just been rescued from a year-long stay on a remote island...” or “You have just won a one-million dollar lottery...”

instrument (p. 6).” Although professional moderators can be hired to conduct focus group interviews, this may not be the most desirable approach. Researchers directly involved with the project may actually be preferred because their familiarity with the research project will help them guide focus group discussions as these discussions evolve. As Morgan and Krueger note, researchers close to the project can more readily sense unanticipated, yet particularly salient, topic areas that merit further elaboration within the focus group.

Basic skills that are needed in a moderator include the ability to lead a discussion, carefully limit (but not eliminate) participation, be respectful of all expressed opinions, establish and enforce the ground rules for the group, and be adaptable and flexible within the context of an evolving group discussion. As long as a member of a research team can demonstrate these skills within a focus group setting, there is limited justification for hiring a professional moderator for the task.

Data Analysis: Analysis of focus group interviews begins with the review and compilation of notes and observations from each of the focus groups. Researchers involved with each focus group (moderator, note-taker(s), and observers) should collectively “de-brief” after each focus group session to document as comprehensively as possible what transpired. Notes should include not only what was said, but the context in which it was said as well as any non-verbal or other indicators that were observed during the discussion. If the focus groups were tape recorded or video recorded, these can be re-played to help complete the summary document. These summaries become the main data base and information source for subsequent analysis.⁵

⁵Although it is possible to transcribe tapes and the audio content of videos, Morgan and Krueger note that many experienced focus group researchers have observed that transcripts are costly, overwhelming in content, and often do not add to research findings based solely on written summaries.

Content analysis is used to interpret focus group summaries. It is important to remember that the unit of analysis is the group. Each group is unique, participants are selected purposefully, not randomly, and the dynamics of group discussions can lead to very different levels of discussion on any particular research question within different focus group interviews. For these reasons, responses can be compiled across all groups only selectively and in the most general sense (e.g., “within each focus group, most consumers spoke favorably of the product”). Content analysis includes the identification and listing of key words or topics, and each comment within a group discussion that uses a key word or addresses a key topic is considered during the analysis. Researchers inductively interpret the findings from the content analysis to draw overall conclusions about the focus group interviews.⁶

An Empirical Example — Consumer Preferences for Fresh Apple Characteristics

Researchers in Michigan State University’s Department of Agricultural Economics, at the request of the Michigan apple industry, began in the early 1990s a process of industry strategic planning for the Michigan apple industry. Through this process and over several years of university-industry partnership efforts, the industry has identified a number of strategic directions that are needed to improve its overall performance and competitive position. One of these is a need to better understand (and thus be better able to meet) changing consumer preferences for fresh apple characteristics. To help the industry address this need, MSU researchers conducted a series of consumer market research studies over several years. These studies used and integrated several research methods including a number of consumer focus groups.

One of the initial activities of the consumer market research was to conduct a set of “exploratory” consumer focus groups to help build insights into and a broader understanding of contemporary

⁶Although one may approach a series of focus groups with certain overarching assumptions, thereby incorporating some deductive methods into the research approach.

consumer thinking and behavior regarding apple purchases. A main objective of these focus groups was to explore how consumers judge the quality of apples and other factors which influence their apple buying decisions. Consumers were asked what apple characteristics are most important to them for their apple purchase decisions, as well as what words they associate with apples, in general, and Michigan apples, in particular. There were also several questions related to apple varieties, preferences for bagged or bulk display apples, purchase intentions for fresh apples and attitudes about trying new varieties.

Several component activities were included as a part of these initial focus groups — consumers were directed through a series of carefully planned questions that led to extensive group discussions, an informal taste test of three newer varieties of apples, and a short written exercise in which consumers were first asked to write down apple varieties with which they were familiar, and then they were presented with a list of apple varieties and asked to write down their impressions of the listed varieties. In this manner the “focus group approach” provided a format to use several data collection methods, which, in turn, provided a more robust understanding of the preferences and perceptions of the focus group participants.

In total, three focus groups were conducted in this manner. All of the participants were initially selected randomly from a local telephone directory and then screened on several criteria. Each focus group participant had to be either the principle shopper in the home or had to share the shopping equally with another member of the household. One focus group consisted of women who were employed outside of the home. Another group included only full-time women homemakers. The third group consisted of a mix of men and women employed outside the home and women who were full-time homemakers.

The findings from these focus groups (Beggs, et. al., 1995) were used as baseline information and input for a subsequent phase of apple market research — a telephone survey that targeted a much larger

sample of consumers (n = 1,350). In this way, these initial focus groups provided an important foundation for a number of subsequent consumer market studies on apples that were conducted by the MSU researchers. In particular, researchers used the focus group findings to help clarify the relevant questions for the telephone survey and to refine the specific wording and nature of many of the survey questions.

For example, at the time of these focus groups, the prevailing “industry wisdom” was that consumers no longer used fresh apples for home cooking. Yet, in the focus groups, a substantial number of the participants indicated that they do use fresh apples for home cooking, particularly in the fall and during holidays. Because of this finding from the focus groups, survey questions were designed to test if this observation was true for a broader consumer population. The telephone survey confirmed that a significant market segment of consumers still use fresh apples for home cooking (particularly in the fall and near holidays). As a result, the Michigan apple industry began to incorporate this insight about consumer behavior into strategies for their advertising and promotional programs.

The findings from the initial focus groups and subsequent telephone survey also indicated that although apple appearance (e.g., in terms of color, size, freedom from blemishes and bruising) is important to consumers, crispness is often even more important in their buying decision, even though crispness usually cannot be observed visually. The findings also clearly document that apple crispness affects consumers’ future purchases of apples much more so than other attributes of the apples such as full red color and size -- two attributes which historically have been emphasized by fresh apple wholesalers and retailers.

After evaluating these market research results on consumer preferences for color, condition and fruit size, industry leaders of the Michigan apple industry, in joint planning discussions with university researchers, decided that it would be desirable to build onto some of these findings, gather more

information and have further clarification on what consumers prefer in regards to these key apple characteristics. Specifically, there was an interest in clarifying more precisely the nature of many of the identified apple characteristics that influence consumer preferences and buying behavior (e.g., How large is a “large” or “medium” apple that is preferred when consumers purchase apples? What constitutes an acceptable level of crispness for apple purchases? How completely red does a “red” apple need to be to generate purchases?). To address these types of market research questions, researchers and industry representatives decided that additional consumer focus groups, combined with visual tests and taste tests, would be conducted to obtain a more precise understanding of the consumer preferences and key purchase threshold levels for these apple characteristics.

Sixteen groups of consumers (with 7 to 10 consumers per group) were organized. Participating consumers were asked to complete a brief questionnaire, take part in visual tests and taste tests of various apple sizes, colors (i.e., degree of full red color) and levels of crispness, and then be a part of a focus group discussion. Eight of these consumer groups were from the Detroit metropolitan area, while eight others were comprised of consumers from the Chicago area. In addition, participants also were screened by several criteria — they needed to be the primary purchaser of groceries in the household, to have purchased apples in the last month, and to have an annual household income of over \$20,000.

As in the earlier focus group study, this focus group approach was used as a format to gather several kinds of relevant information and data. By combining taste test and visual test methods with the focus group discussions, researchers were able to garner more information out of all of these research approaches compared to what could have been achieved if each approach had been done independently. For example, by having consumers taste apples at three different levels of apple condition (i.e., crispness) and then providing them (through the focus group) with an opportunity to discuss within the context of a

group dynamic why or why not they considered a particular level of fruit condition desirable gave a much more robust set of insights than could have been achieved with just taste tests or focus group discussions.

Several topics were covered during the focus group discussions in addition to the participants' reactions to the apples they had tasted and visually evaluated. These included a range of discussion questions concerning how they usually select apples they choose to purchase, the general importance of apple crispness, size and color, what apple merchandising approaches influence them, and how and where the participants typically purchase apples.

The specific results from these taste and visual tests and focus group discussions were summarized and their implications for industry demand-expansion strategies were discussed with key industry organizations (Greaves, et. al., 1998). In general, these findings have proven to be very useful to the Michigan apple industry. Some of the informational insights gained from these consumer market studies have helped the industry more closely align its promotional programs, marketing, and production strategies to meet changing consumer preferences and needs. For example, the focus groups helped identify words and images consumers associate with apples in general, and Michigan apples in particular. These findings are now incorporated in the promotional programs and advertisements sponsored by the Michigan Apple Committee. Similarly, the identified importance of crispness has contributed to a major emphasis within the apple industry in recent years to improve its performance in supplying crisp apples. These efforts have included improved vertical coordination and management by growers, packing houses, storage facilities and shippers so that the industry as a whole is now more effective in providing crisp apples to its customers. These steps to improve the industry's performance have also included modernization investments in orchards, and storage and packing facilities that help provide apples of good condition.

Conclusion

Focus groups have great potential as a research method for agribusiness research. In the empirical example discussed in this paper, it was shown that exploratory focus groups generated useful information that led to industry requests for further market research and helped researchers refine the nature of their research questions and specific testable hypotheses. Subsequent research, based on a combination of research methods (including consumer and trade surveys, taste and visual tests, and additional focus groups), generated results that have led to specific strategies and industry actions that are now being implemented by a regional agricultural commodity industry.

Focus groups are, in and of themselves, very useful for generating insights into the motivations and attitudes of market participants, and for gaining a much greater understanding of the complexity of factors that lead to observable market behavior. And as was demonstrated in the empirical example, focus groups are a research method which can advantageously be used with other research methods. When combined with other methods (e.g., surveys or other consumer market research methods like taste and visual tests), the results are more than a sum of the parts. The complementarity of the methods often leads to more robust findings than would have been possible had each research method been employed independently.

Agribusiness researchers need to recognize that focus groups are a widely accepted and frequently employed tool for gathering information within the manufacturing sector, as well as other social science fields. Focus group research methods are well-developed and are becoming standardized. Even though this approach is qualitative, and its findings cannot be statistically extrapolated to general populations, focus groups provide a range of useful information that is clearly valued by both the private sector and other social science researchers.

Bibliography

- Aubel, J. 1994. "Guidelines for studies using the group interview technique." Geneva: International Labour Office, Training Papers in Population and Family Welfare Education in the Worksetting, Paper No. 2.
- Beggs, J., D. Ricks and K. Heinze. "Consumer Focus Group Results on Michigan Apples." Department of Agricultural Economics, Michigan State University, Staff Paper 95-33, September 1995.
- Carey, M. A. 1994. "The Group Effect in Focus Groups: Planning, Implementing, and Interpreting Focus Group Research." In *Critical Issues in Qualitative Research Methods*, J. M. Morse, ed., pp. 225-41. Thousand Oaks, CA: Sage Publications.
- Greaves, A. Jeffers, D. Ricks and K. Heinze. "Michigan Apples: Consumer Preference Results from Taste Tests, Visual Tests and Focus Group Discussions." Department of Agricultural Economics, Michigan State University, Staff Paper 98-28, August 1998.
- Greenbaum, T. L. 1998. *The Handbook for focus group research*. 2nd ed. Thousand Oaks, CA: Sage Publications.
- Jeffers, A. C. 1998. Consumer Market Research on Michigan Apples: Consumer Preferences from Visual Tests, Taste Tests, and Focus Group Discussions. East Lansing, MI: Michigan State University. A Masters Thesis.
- Krueger, R. A. 1994. *Focus Groups A Practical Guide to Applied Research*. 2nd ed. Thousand Oaks, CA: Sage Publications.
- Knodel, J. 1993. "The Design and Analysis of Focus Group Studies." In *Successful Focus Groups Advancing the State of the Art*, D. L. Morgan, ed., pp. 35-50. Newbury Park, CA: Sage Publications.
- Morgan, D. L. 1997. *Focus Groups as Qualitative Research*. 2nd ed. Thousand Oaks, CA: Sage Publications, Qualitative Research Methods series, Vol. 16.
- Morgan, D. L. and R. Krueger. 1993. "When to Use Focus Groups and Why." In *Successful Focus Groups Advancing the State of the Art*, D. L. Morgan, ed., pp. 3-19. Newbury Park, CA: Sage Publications.
- Stewart, D. W. and P. N. Shamdasani. 1990. *Focus Groups: Theory and Practice*. Newbury Park, CA: Sage Publications, Applied Social Research Methods series, Vol. 20.
- Templeton, J. F. 1987. *Focus Groups A Guide for Marketing and Advertising Professionals*. Chicago: Probus Publishing Company.