Information Technology Use by Small-Scale Grocers
Stan Ernst, Neal H. Hooker, Leslie Stoel, and Daniel J. Sanders

Rural and small-town food retailers struggling to compete with lower margins and greater competition must also struggle with the changing footprint of information technology on their firm. Challenges in managing supplies and suppliers are matched with increasing consumer interest in using technology to manage retail relationships. Recent discussion has focused on ways to better leverage information technology to expand market reach or increase supply-chain efficiency. However, much promotion of “advantages” of e-commerce has had little basis, beyond adopter enthusiasm, on strategic recommendations relevant to such retailers. This research report builds on our ongoing studies of the use of information technologies by rural retailers and the marketing of groceries on the Internet. It presents new findings on grocer technology use and discusses implications of these findings for firm management and supply-change infrastructure.

Methods

Key informant interviews conducted in Summer 2005 with selected rural/independent grocers in Ohio were used to build a survey of 1,000 similar grocers in Ohio, Kentucky, and West Virginia. Included in the sample were independent firms and those from chains of less than 11 retail locations. The instrument was administered in late spring of 2006. An adjusted population from undeliverable addresses and firm closings yielded a preliminary response rate of 8.2 percent, with responses still being collected. Preliminary data were compiled and analyzed statistically. Findings from this report are being used concurrently with existing data from research conducted on larger e-grocers to develop tools and education curriculum for these retailers to use in developing viable information technology strategies and to evaluate their potential for online marketing and sales.

Preliminary Analysis

Of firms responding to the survey, 86 percent have fax machines, 81.8 percent use computers for record keeping, 61.4 percent have a computerized check-out system, and 15.9 percent of respondents use computerized inventory tracking. About 61 percent have web access and 25 percent have their own web site. Only one respondent in this sample is selling groceries online, and two firms have self-checkout systems. Of the 54 percent of firms using the Internet for business purposes nearly half (47.9 percent) were researching products, 36.6 percent were ordering supplies online and a somewhat surprising 29 percent were banking online. Considerably fewer grocers had store and product information online for customers.

Attitudes toward computer usage and online food sales were revealing. Nearly all respondents had positive or negative feelings in response to the statement, “I’ll never use a computer unless I absolutely have to.” An overwhelming 72.9 percent disagreed with this statement. Of those agreeing that they would never use a computer unless necessary, 16 percent were very strong in that belief. On a question of consumers’ willingness to buy high-quality food online, the retailers were less sure—most (56 percent) remained neutral, with 22.9 percent somewhat agreeing with a statement that consumers would buy such foods online. These findings and other details from the 2005 qualitative study and the 2006 survey have been applied to build a curriculum for the Southern Rural Development Center to help rural food retailers evaluate the potential adoption of information technology in their businesses.

Pie Potential: Examining Berry Market Expansion through Baked Goods
Stan Ernst, Marvin T. Batte, Julie T. McNaull

This update reports on part of a research project, “An Extended-Season Berry Production and Marketing System to Enhance Viability of Small Appalachian Farms and Rural Communities.” This NRI-funded project studies impacts on small farms and rural communities of widespread adoption of a unique full-season system of berry production with sales to high-value markets. This project combines research on the required production system; on marketing strategies for high-value berries and berry products produced from this region; and on the impact such production and processing may have on case-study communities. This research update addresses market potential of extending high-value product sales from the berry-production system in the form of baked goods—specifically, consumer-sale pies.

Methods

During summer 2006 an adapted store-interpret technique was used to evaluate consumer preferences toward baked berry pies and their willingness-to-pay for specific attributes. More specifically, we examined characteristics of origin and freshness/quality guarantees in the context of price sensitivity. A focus group was used to determine marketing language and techniques, price-sensitivity ranges, and product-quality and ingredient characteristics likely to influence purchase of fresh pies. From this data, a field-survey instrument and contingent-valuation experiment were designed and field tested. Following testing, consumers were approached at grocery stores and at specialty bakeries and restaurants recognizing their as their carryout sales of pie products. Because preference for locally produced foods is expected to be related to household and shopper attributes, stores sampled included rural, city-center, and suburban locations. This increases the variability within the sample of attributes such as household income, education levels, race, and other demographic features, and enhances our estimation of consumer willingness-to-pay for the studied attributes. In all store intercepts, a computer-based choice experiment and in-store questionnaire are administered. Conjoint analysis of consumer preferences is used to determine willingness-to-pay for each of the studied attributes.

Preliminary Analysis

Marketing of value-added berry products may provide an opportunity for the small farm to capture a greater share of consumers’ food budgets. However, dealing with highly perishable products that are sold based on perceived quality and consumers’ emotional attachment with the product requires unique knowledge of pie characteristics that are not only valued by consumers but most likely to cue a higher-dollar purchase. This research is providing guidance on the level of premium that may realistically be captured for specific product attributes and producer identities. Ultimately, this will help us determine the viability of expanding commercial baking and artisan food enterprises from the region targeted for expanded berry production.