

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Is Online Grocery Shopping Increasing in Strength?

James J. Corbett

Online grocery shopping is a relatively new innovation with regard to the way in which one purchases groceries. Some interesting concepts—designed to enhance the process of making grocery products available for consumption of the ever-changing consumer—have entered the food distribution industry channels. A telephone survey was conducted in the Boston trading area to determine the profile of online grocery consumers who are familiar with online grocery shopping.

Introduction

Alternatives to traditional grocery shopping have been developed in response to consumer demands for time-saving products and services. Grocers are offering some meal replacement items, ranging from packaged precut salad greens to comfort foods. Online grocery shopping is also on the rise (Falkman, 1998). As the retail industry continues to swell into every corner of cyberspace, some online consumers are finding that doing their weekly grocery shopping is quickly becoming synonymous with the pleasures of ordering books, music and other impulse-driven merchandise (Corral, 1999).

When a customer walks into a supermarket, it is a fairly easy matter to scan a frequent-shopper card to offer discounts to top customers. Online grocery ventures, whether they are operated by a brick-and-mortar retailer or an Internet-only player, are searching for similar ways to incite loyalty (Zimmemann, 1999). While having groceries delivered to your home is not something new-after all, it used to be the only way to buy milk-online grocery shopping is becoming increasingly popular. Most online grocery services are usually set up in one of two ways. First, like Peapod, they can contract your local supermarket and deliver whatever is available from your local supermarket. Second, they can purchase from distribution centers and supply a variety of products from a central source (Silver, 1997).

Online Grocery Shopping

The beauty of online grocery shopping services is that they allow the supermarket to create a customer database featuring highly specific information about each customer that uses the service. The efficacy of all online marketing initiatives can be immediately ascertained due to the unique nature of the technology. It has been welldocumented that the era of mass marketing has given way to one-to-one marketing. Providing individual consumers with ads and promotional offers customized to their individual preferences is the optimal way to market (Dorgan, 1997). Practiced correctly, one-to-one marketing can increase the value of your customer base. The idea is simple: one-to-one marketing means being able to change your behavior toward an individual customer based on what the customer tells you and what else you know about that customer (Peppers, 1999).

At \$430 million in sales in 1999, online grocery shopping is still a drop in the bucket of the \$450 billion grocery market—but it is growing fast. Sales are expected to more than quintriple by 2001 to \$2.3 billion, according to Gomez Advisors, an Internet research company (Chatzky, 2000). Other Internet analysts predict that online grocery sales figures could reach \$11 billion by 2003 (Janoff, 1999). According to Anderson Consulting, online grocery shopping will be a \$60-85 billion-a-year business by 2005 (Anderson, 1999). Although online grocery shopping still constitutes a small percentage of the American total, Anderson Consulting predicts that, within the next six to 10 years, alternative grocery shopping will represent 8-12 percent of the consumer packaged-good channel and 15-20 million households will do at least some of their shopping via alternative methods (Falkman, 1998).

The Boston Trading Area

The Boston market has four online grocery ventures that provide shopping services for subscribers in an effort to improve the quality of their time away from work and to afford them more time to spend with their families. Some doubt the success of such ventures, believing that shoppers prefer to actually see what they are buying, but the potential success of Streamline and its competitors Peapod, Home Runs, as well as Shop Link, overshadow these doubts (Lardner, 1998).

Also entering the online grocery business was auctioneer Priceline.com—the Internet company that first made its market in Ecommerce sectors, such as airline tickets, by enabling web surfers to name their own prices (Orgel, 1999). Not to be confused with homedelivered online shopping, Priceline.com allows customers to bid on grocery prices from their home computer but requires them to visit the retailer to collect the groceries. The shopper can place bids on approximately 800 brand name goods and categories. Then, manufacturer partners of Priceline.com accept or decline the bid prices (The Griffin Report, 2000).

In the traditional model of commerce, a seller advertises a unit of supply in the marketplace at a specified price, and a buyer takes it or leaves it. Priceline.com turns that model around. According to Jay Walker, buyers are allowed to advertise a unit of demand to a group of sellers. The sellers can then decide whether to fill that demand or not. In effect, this provides a mechanism for collecting and forwarding units of demand to interested sellers—a demand collection system (Walker, 1999).

Methodology

The counties of Essex, Middlesex, Suffolk, Norfolk and Plymouth constitute the Boston trading area. This is also referred to as the Boston Standard Metropolitan Statistical Area with a population of approximately 3,885,200 people. A target sample of individuals who currently purchase groceries online was identified from this particular trading area.

There were 75 individuals who were interviewed over the phone during September of 2000. These telephone interviews took about 30 minutes, and each survey respondent was asked 20 questions. Of the 75 questionnaires that were completed, 88 percent, or 66 questionnaires, could be deemed as useable for the study. This may be considered a small sample; however, we were targeting an audience who currently utilized online grocery shopping as an alternative to the traditional grocery shopping experience.

To obtain information concerning online grocery shopping in the Boston trading area, each survey respondent must purchase online from one of the following: Peapod, Home Runs, Shoplink, Streamline, or Priceline companies.

Findings

The 66 online grocery shoppers who comprised the actual sample had a median age of 34.5 years and a median income of approximately \$50,000 per year. There were 17 males and 49 females, with 56 percent married, 33 percent single, and 11 percent divorced. The data show that 30 percent of the respondents were high school graduates while 54 percent were college graduates. The highest number of respondents came from the counties of Middlesex, 38 percent; Essex, 27 percent; and Plymouth, 20 percent. They were followed by Suffolk with 9 percent and Norfolk with 6 percent.

Table 1 shows that 33 percent of the respondents use Peapod, followed by 25 percent using Priceline, 20 percent using Shoplink, and 11 percent using Home Runs as well as Streamline.

Table 1.	Frequencies (F), Percentages (%), and			
	Cumulative Percentages (Cum. %) of			
	the Online Grocery Shopping			
	Used by Respondents.			

Online Grocery			Cum.
Company Used	f	%	%
Peapod	22	33	33
Home Runs	7	11	44
Shoplink	13	20	64
Streamline	7	11	75
Priceline	17	25	100

Table 2 shows that 51 percent of the respondents learned about online grocery shopping from family and friends, followed by advertisements with 30 percent, and Internet browsing with 19 percent. The primary reasons for buying groceries online were convenience, 37 percent; time savings, 29 percent; easier/faster, 27 percent; and hate grocery shopping, 7 percent. The respondents cited the following: meats, 23 percent; produce, 18 percent; fruits, 17 percent; dairy, 16 percent; deli, bakery, health & beauty aids, 7 percent; and seafood, 5 percent as grocery products not purchased online.

Table 3 shows that 30 percent of the respondents have been shopping online for groceries less than six months, with 36 percent shopping between six and 12 months. The remaining one to two years and over two years are 20 percent and 14 percent, respectively. The day of the week that the respondents shop, as indicated by frequency

Classification	f	%	Cum. %
How Consumers Learned About	t Online Grocery Shopping		
Internet Browsing	14	19	19
Family and Friends	38	51	70
Advertisements	23	30	100
Primary Reasons for Buying Or	aline		
Hate Shopping	5	7	7
Time	22	29	36
Easier and Faster	20	27	53
Convenience	28	37	100
Grocery Products Not Purchase	ed Online		
Produce	20	18	18
Fruit	19	17	. 35
Meats	24	23	58
Deli	8	7	65
Seafood	6	5	70
Dairy	17	16	86
Beauty	8	7	93
Bakery	8	7	100

Table 2. Frequencies (f), Percentages (%), and Cumulative Percentages (Cum. %) of OnlineGrocery Shopping, Classified by How Consumers Learn About It, Primary Reasonfor Buying Online, and Grocery Products Not Purchased Online.

Table 3. Frequencies (f), Percentages (%), and Cumulative Percentages (Cum. %) of Online
Grocery Shopping, Classified by How Long Consumers Have Been Shopping Online,
Day of the Week They Shop Online, and Time of the Day They Shop Online.

Classification	f	%	Cum. %
How Long Consumers Have Bee	en Shopping Online		<u>, , , , , , , , , , , , , , , , , , , </u>
Less Than 6 Months	20	30	30
6–12 Months	24	36	66
1-2 Years	13	20	86
Day of the Week They Shop Onl	ine		
Monday	6	9	9
Tuesday	8	12	21
Wednesday	4	6	27
Thursday	2	3	30
Friday	11	17	47
Saturday	9	14	61
Sunday	26	39	100
Time of the Day They Shop Onla	ine		
Before 3:00 p.m.	17	26	26
After 3:00 p.m.	29	44	70
No Particular Time	20	30	100

of response, were Sunday, 39 percent; Friday, 17 percent; Saturday, 14 percent; Tuesday, 12 percent; Monday, 9 percent; Wednesday, 6 percent; and Thursday, 3 percent. The time that was most frequently cited was after 3 p.m. with 44 percent and before 3 p.m. with 26 percent. However, 30 percent indicated that there was no particular time of day for major online grocery shopping.

Respondents noted that yes they would (65 percent) or no they would not (35 percent) allow substitution if a product that they had ordered were out of stock. A final question was asked: Will online grocery shopping increase or decrease during the next 5 years? The overwhelming answer was increase with 91 percent while only 9 percent indicated a decrease in online grocery shopping.

Concluding Comments

There can be little doubt that some form of online grocery shopping is viable in the Boston trading area in the future. One can easily see how there are several different strategies being employed at this time. However, there does not appear to be any substantial evidence to date that will support the possessor of the best channel of an online grocery shopping delivery system strategy. An adjustment phase is taking place, whereby the companies involved with online grocery shopping are investigating opportunity areas for the best business model. In order to be successful, the online grocery-shopping model should be increasing order frequency while at the same time decreasing delivery costs.

The grocery business is noted for having high costs as well as very low profits, resulting in very thin profit margins. This does not appear to lend itself to unlimited risk-taking expenditures. Based on some historical data, a "click and mortar" strategy using a website and an old fashioned grocery store might be the smartest way to proceed as compared to the use of a free-standing, centrally located warehouse. This model should have lower costs because it may use existing stores as well as store space to fill the online grocery orders. Hopefully, this can be accomplished without cannibalizing their existing stores.

A business model needs to evolve whereby online grocery shopping would increase in the Boston trading area. The key ingredient could be the demographics, which comprise the highly populated Boston trading area. As an aside, the same could also hold true for the San Francisco Bay trading area. Some more money, time, and effort needs to be invested in refining the existing types of online grocery shopping delivery systems. Many implications suggest that young people, both single and married, are stressed for time and that some form of online grocery shopping will emerge in the Boston trading area. Yet, in order to succeed, some effective strategy model needs to evolve in order to meet the challenge of online grocery shopping.

One of the more important risk factors to online grocery shopping may be perceptions, and this may be difficult to overcome. There are those who are betting that the dollars now being spent on this concept will pay very big dividends in the future. Other players in the grocery business subscribe to the philosophy that it is better to be a slow second than a fast first. However, a best model solution for online grocery shopping could benefit its designer as much or more than the introduction of Tide detergent to the marketplace benefited its designers.

References

- Andersen, Arthur. 1999. "New Supply Chain Kick into Gear." Modern Materials Handling. 30 November.
- Chatzky, Jean Sherman. 2000. "You've Got Groceries." Money Smart USA Weekend. 28-30 January.
- Corrall, Cecile B. 1999. "On-line Grocery Shopping Heats Up Despite Concern Over Big Issues." *Discount Store News*. 12 July.
- Dorgan, Tim. 1997. "Belief in the Future." Progressive Grocer. February.
- Falkman, Mary Ann. 1998. "Shop 'til I Drop? Who, Me?!" Packaging Digest. July.
- Griffin Report. 2000. "Wegnans Partners with Priceline in Three State." April.
- Janoff, Barry. 1999. "Point, Click, Shop." Progressive Grocer. June.
- Lardner, James. 1998. "Please Don't Squeeze the Tomatoes Online." U.S. News & World Report. 9 November.
- Orgel, David. 1999. "Food Retailers Test On-Line Waters." Supermarket News. 27 December.
- Peppers, Don, Martha Rogers, and Bob Dorf. 1999. "Is Your Company for One-To-One Marketing." Harvard Business Review. January-February.
- Silver, Julia. 1997. "On-line Grocery Shopping." Accent on Living. Winter.
- Walker, Jay. 1999. "Redesigning Business." Harvard Business Review. November-December.
- Zimmermann, Kim Ann. 1999. "Making the Web Sticky; How do On-Line Retailers Capture Customer Loyalty? By Entwining Them With the Same Kinds of Rewards Brick-and-Mortar Stores Use." Supermarket News. 18 October.