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Social Spaces and Information Encountering: Grocery Shopping Behavior and the Implications for the Design of Information Systems

GROUP DEFINITION

Everyone needs food. In a consumer society such as the United States, shopping for groceries takes place either regularly or at least at some point in nearly everyone's life. Additionally, grocery shopping cuts across all demographic boundaries including gender, age, religion, ethnicity, education, and profession. In fact, grocery shopping might be one of the most universal of every day life activities that Americans engage in.

Where do people purchase groceries? Two main types of market settings are examined in this study. "Typical" grocery stores are usually seen under one roof or name and include such brands as QFC or Safeway. These stores are equipped with standard technology, provide multiple categories of goods from a single business unit, and are generally not used as social spaces. In contrast, "atypical" grocery stores or markets may span multiple buildings or open spaces, contain multiple business units each with a narrower selection of goods, and are likely to be more open for socialization. Pike Place Market in Seattle, WA is an example of an atypical grocery store and was used as the basis for this study.

It is interesting to note that there are different aspects of grocery shopping and people have different attitudes toward it. As such, there are several main factors that must be taken into account when discussing grocery shopping. First, shopping in general, and grocery shopping in particular, is an ongoing task or responsibility of every life that people perform throughout their lives. Because of this never-ending need, grocery shopping is often regarded as a laborious activity or work that is unavoidable (Prus & Dawson, 1991). Time constraints, lack of interest, or financial concerns may cause grocery shoppers stress when the time comes to complete the task.

However, in some instances people may consider general shopping as a recreational activity (Prus & Dawson, 1991). For example, young women may enjoy shopping for new clothes. Might research conducted on recreational shopping apply to the seemingly mundane task of grocery shopping?

In addition to the attitudes grocery shoppers have toward their task, there are other factors that weigh in on the grocery shopping experience. Some shoppers go shopping more often while others tend to shop less frequently; some shoppers enjoy companionship while others shop alone. It is also worth noting that some people go shopping with a clear or specific goal in mind; they have a defined list and might not deviate from it. In contrast, some shoppers more frequently engage in impulse buying and make decisions based on whether they "like what they see".

The information behavior of grocery shoppers is a subject that is ripe for examination. There are clear parallels between grocery shoppers and information seekers because grocery shoppers seek information for various purposes, including product selection. Additionally, because grocery shoppers operate in an information-rich environment, they also engage in other behaviors that are recognizable to information scientists, including seeking, browsing, encountering, and ignoring.

LITERATURE REVIEW

Interestingly, the information behavior of consumers has not been well documented in the scholarly literature of the information science field, which has often focused on specifically job-related information seeking. However, the consumer research and marketing fields, for obvious reasons, have been very interested in understanding and capitalizing on the behavior and mindset of their potential customers. Indeed, much of the literature on shopper behavior found within these fields, as well as the field of sociology, proves illuminating for understanding the range of

the information seeking behavior of consumers as a group.

Consensus

Much of the research on shopper behavior can be broadly grouped under the umbrella of "consumer decision-making"; that is, what types of information do people need, seek, consider, and utilize when learning about a product and making a choice to buy that product. While a few studies apply mathematically derived economic theory to consumer behavior (Haines, 1973; Putrevu and Ratchford, 1997), most focus on the psychological aspects of consumer behavior and attempt to assess internal motivations for shopping decisions. Learning theory, for example, is applied to consumer behavior research to show how associative learning techniques and classic Pavlovian conditioning–such as advertising a carton of cigarettes against a backdrop of a clean, fresh, snowy winter scene–can often elicit enough positive emotion in buyers to encourage a purchase without them seeking other information about the product (Hawkins, Best & Coney, 1983; Ray, 1973; Shimp, 1991).

Other inquiries into psychological behavior give credence to the idea of consumers as rational seekers of information, especially about the products they buy. These researchers posit that the decision to make a purchase of a particular brand is based mainly on the systematic comprehending, evaluating and integrating of information about a product (Petty, Unnava, & Strathman, 1991). Howard and Sheth (1969) give further structure to this idea by referring to "choice criteria" where buyers mentally organize both their motives for purchase and the information they have acquired about certain goods so that they can more efficiently evaluate the product at hand.

Memory is a third area where much psychological research is utilized to understand consumer behavior. Some researchers focus on how the retrieval of information from long-term

memory influences shoppers (Hawkins, Best & Coney, 1983) while others (Bettman, Johnson, & Payne, 1991) categorize the decision process as resulting from a combination of this "memory-based" information along with "stimulus-based" or externally available information from advertisements or packaging.

Disagreement

While some researchers concentrate solely on the psychological motivations of consumers, others disagree with this narrow view and advance the idea that the external factors found in the buying environment are equally as important in understanding the information behavior of shoppers. These "situational variables" (Belk, 1975) include the physical surroundings, social atmosphere, time of day and season of year, reason for the shopping trip, and the ephemeral mood of the buyer.

Delving deeper into the importance of social atmosphere, numerous studies focus on social group dynamics and buyer behavior. Ostlund (1973) describes how information sharing within one's social network can influence how individuals determine which brand is "best". Additionally, Ostlund examines how a person's identification with a larger societal group may subtly influence brand preference: identification with "young bachelors" may lead one to purchase a sports car instead of a station wagon, for instance. In-group biases towards information relevance also have a similar impact (Folkes and Kiesler, 1991) as do the different information seeking and sharing behaviors of various groups to which consumers may belong, based on their age, culture, gender and economic class (Hawkins, Best & Coney, 1983).

Anomalies

Information behavior, however, is not always as goal-oriented, rational, and linear as some research has presupposed. Consumers may use random information when making a

purchase decision (Olshavsky & Granbois, 1979) and they often gather information through ongoing browsing activities (Bloch, Ridgway & Sherrell, 1989) where they may not necessarily make a purchase.

In addition, many consumers simply find shopping fun. Rather than a utilitarian search for products and information, consumer behavior can be motivated by hedonistic impulses (Schmidt & Spreng, 1996; Bloch, Sherrell & Ridgway, 1986), by the desire to socialize and share information with their friends (Prus, 1993; Kim, Kang & Kim, 2005), and by the perception that shopping can be an entertaining and adventuresome experience (Prus and Dawson, 1991).

For Further Study

Two areas of consumer information behavior deserve further investigation. The first of these is the notion of how the shopping environment itself influences consumer search behavior and receptiveness to new information. Central to this theme is the idea of the social atmosphere of the marketplace; this arena can be ripe with both information exchange and human drama (Prus, 1994). Certain shopping arenas have the potential to encourage social interaction and information sharing between and among customers and vendors (Harris, Baron & Davies, 1999). Additionally, word-of-mouth communication helps direct the flow of information to consumers (Christiansen & Snepenger, 2005). Both the “recreational” aspect of a specific shopping locale and the “entertainment” motivation of the particular consumer have the potential to greatly affect the flow and receptiveness to new information.

The second area in need of further investigation is how the concept of information encountering, or bumping into information that was not actively being sought (Erdelez, 1999), relates to consumer behavior. Even though consumers often systematically seek out information,

"…a significant part of daily information may emerge accidentally" (Savolainen, 1995, p. 272). Others (Erdelez, 1997; Case, 2002) note that information encountering has not been sufficiently explored in the field of information science; this type of behavior, which often occurs in everyday life situations like those of consumers, merits further attention.

But what kind of attention? Some research questions may include how the social atmosphere of the marketplace might encourage such information encountering to take place, how serendipitous information gathering is important for shoppers, and how understanding this type of consumer behavior can make a practical contribution to the design and delivery of information services.

FIELDWORK

Hypotheses

This study was designed to focus on some key issues that were brought up in the literature. First, it is likely that information encountering will be more frequently observable in environments that are perceived as more *socially* oriented than *practically* oriented. Also, it is likely that along a continuum from a *practical* "information grounds" (as defined by Fisher, 2005) to a *social* information grounds, typical grocery stores are located at the practical end and Pike Place Market on the social end. Finally, because of its social environment, Pike Place Market shoppers who experience more information encountering incidents will retain more information for later use than shoppers at typical grocery stores.

Definitions

How is a typical grocery store defined in contrast with Pike Place Market? Typical grocery stores are perhaps best identified by listing members of the set: QFC, PCC, Safeway, Whole Foods, Trader Joe's, Fred Meyer, Montlake's Hop In Market, and so on. These stores

may be structured non-commercially as a co-op, or be perceived as a “big box” or “commercial grocery store” alternative, but they are essentially self-contained in buildings, have open floor plans to facilitate traffic flow, and have a singular entrance and exit.

In contrast, Pike Place Market is a collection of not only vendors who sell items typically found in grocery stores like fresh fish or organic fruit, but also permanent shops, vendors who sell non-food items, artists, and others. Like a farmer’s market, there is a regularly established physical location; it is dynamic and vendors and products may vary week-to-week or season-to-season. Additionally, Pike Place Market is a rich environment with a colorful history that draws tourists to its multi-level, scenic waterfront location. If grocery shopping could be classified as a social event and not a chore, Pike Place Market is the debutante ball of grocery shopping.

Methods: Observations

In order to compare the practical environment of a typical grocery store to the social environment of Pike Place Market (PPM), ten separate observations were carried out. These observations provided a framework for designing the in-depth interviews to be conducted afterwards. Initial observations took place at five typical grocery stores, four of which were located across urban Seattle, with the remainder in Burien, WA. These initial five observations took place on various days and times within the same week in October 2006. Researchers made an effort to record the conversations they overheard as well as their contexts. Observers recorded notes by writing on what appeared to be shopping lists. However, the use of pen and paper instead of recording devices imposed limits on the observers’ capability to record all observable behavior. Therefore, capturing the entirety of fewer conversations was deemed more important than capturing many partial conversations. Additionally, the reading of labels or other non-verbal information behavior was not recorded or measured; only conversations and other human-to-

human interaction were recorded. The same method of observation took place on five separate occasions at PPM. On the first occasion, four researchers recorded observations from disparate stations throughout the market over the same time period on the same Saturday; the remaining observations were performed on different days and times, one by each observer.

After the field notes were transcribed, two coders assigned numerical values to each observed incident, attributing each shopper's overall information behavior to one of five categories: ignoring/avoidance, seeking, passive (expected), passive (unexpected), and other. These assignations were possible for two reasons: each category was clearly defined, and the recorded words of the observed spoke for themselves. Thus, ignoring/avoidance behavior was coded if explicitly stated by a subject (a reply of "No, thank you," to vendor's "Would you like to try…?" question) or explicitly observed (in the same example, a head shaking "no" as a response to the vendor). Likewise, seeking behavior was coded if an explicit question was asked, such as "How much is that?"

The information encountering behavior, or "bumping into information while carrying on a routine activity" (Erdelez 1999, p 25), was coded in two categories: "passive, expected"; and "passive, unexpected". The first category included encountered information that could be considered, from the receiving subject's viewpoint, as expected. While some interpretation exists here, the incidents were coded with "passive, expected" if the information was both not explicitly sought and was information related to the environment. For example, if a cashier noted how much was saved by using a rewards card, but this information was not explicitly requested, it was coded as "passive, expected" because the shopper did not seek that information and it fell within the range of what a customer would expect to "bump into" in that environment.

Conversely, encountered information that was not related directly to the environment and

was heard or overheard by shoppers was coded as “passive, unexpected.” One example was an observation that consisted of one customer who stood in line and overheard another customer describe the recent breakup of his relationship. Even if some subjects–for example, a friend who accompanied the speaker–would describe this information as “expected” from their own frames of reference, the explicit information was not of a type that the observed subject sought or would expect to “bump into” it at a grocery store; thus it was coded as “passive, unexpected”.

Finally, some speech could not be identified as falling into any of these categories. This may be due to a lack of context, since many recorded incidents occurred while subjects were moving past the observer. These incidents were coded as “other”.

In order to avoid coding error, two researchers coded each “information incident” and then compared their results. Over 75% correlation was initially achieved; incidents that had anomalous coding results were discussed and recoded. In total, 53 separate incidents were coded for the typical grocery store observations, and 121 separate incidents for PPM.

This method was a hybrid approach: qualitative data in the form of observed, transcribed, and coded incidents were then analyzed quantitatively. Even so, the observational approach does not allow subjects to describe their experiences or perceptions in their own words. Without these additional in-depth responses and the light they shed on information behavior, observational data cannot be fully contextualized.

Methods: Interviews

A sample of twelve interviewees was determined on the basis of accessibility to the researchers. Time and budgetary constraints precluded a cross-sectional demographic analysis and statistically derived sample group, so a precursor or qualifying question was asked: “Have you shopped for groceries at Pike Place Market recently?” Additionally, potential subjects falling

below the age of 20 were eliminated, on the hypothetical grounds that the responsibility for doing regular, practical grocery shopping may not fall to them. The nine female and three male interviewees were distributed across these three age ranges: five were between 20 and 35, three were between 36 and 49, and four were 50 or over.

Interviewees were asked to respond to a series of twenty structured questions, including the two demographic questions relating to gender and age (See Interview Questions, Appendix 1). An attempt was made to avoid terms of art and to make the non-demographic questions as open-ended as possible. For example, by asking interviewees "What types of interesting things did you find out about while you were there [at the store]," the aim was to get interviewees to talk about their own information behavior in a way that was unconstrained by preconceptions about "information" or "usefulness" or "expected behavior."

Additionally, three concluding questions asked interviewees to compare the environments of their typical grocery stores with PPM along these dimensions: physical environment, "what you found out about," and "the time you spent talking to people." While reviewing the responses for the last question, it was discovered that the phrasing was not as precise as it could have been. Several interviewees focused on the "time spent" dimension and provided answers that addressed speed or efficiency, as opposed to the nature or context of those conversations. These questions, however, were not designed for analysis beyond examining how interviewees were oriented to a particular shopping experience.

Like the observations, a codebook was developed for the qualitative interview responses. A coding and coding review process identical to the process used for the observations was used for the interviews, with the exception of the three comparative questions (Q18-Q20). The key dimensions analyzed were: practical vs. social environments (Q7, Q13); planned vs. impulse

decision-making (Q8, Q15); expected vs. unexpected information (Q10, Q16); and level of utility (Q11, Q17).

For the practical vs. social questions, responses were coded as practical if there was no element of "fun" involved, and social if there was no element of "work" involved (Prus & Dawson 1991). For example, if a respondent said they went to the grocery store because it was close to where they lived or because the prices were good, it was coded as a practical response. Likewise, if an interviewee said they went to PPM because it was an interesting place to take their out of town guests, that was coded as a social response. For the planned versus impulse questions, responses like "I used a list" were coded as planned, and responses like "I bought whatever looked good at the time" were coded as impulse. To determine utility, responses were given one or more of three codes: used immediately, used later, and never used, the latter of which had to be stated explicitly. Finally, as in the observations, responses were coded as either "expected" or related to the environment, or "unexpected" or unrelated.

Unlike the observations, the active or passive nature of the behavior that resulted in acquiring this information could not be identified. It should also be noted that because of the open nature of the questions, multiple codes could be (and were) assigned to responses to many of the questions, and so analysis examined the total *number of responses* that fell into a particular category, rather than the *number of respondents*, and the data charts (Appendix 2) are labeled as such.

Findings

The distribution of information behaviors observed at typical grocery stores (TGS) was significantly different from that of Pike Place Market (PPM). Because the incident sample sizes were significantly different from each other (121 at PPM vs. 53 at TGSs), percentages were used

to compare the two environments. For example, while 65% of TGS shoppers engaged in active information seeking, only 29% of PPM shoppers did. And while PPM shoppers were observed in passive, encountering behaviors during 57% of the incidents, TGS shoppers were observed with those behaviors only 26% of the time. PPM shoppers practiced information avoidance during 5% of the incidents, while TGS shoppers never did. These percentages for avoidance seem low; it is surmised that many more incidents occurred that were not observed, especially in an environment like PPM where vendors make efforts to interact with potential customers.

One hundred percent of the interviewees did their routine grocery shopping at typical grocery stores. This one-sided result may be due to the sample size, but it nonetheless emphasizes the difference between the practical and social realms of grocery shopping. Similarly, in answering the "Why did you decide to shop there?" questions (Q7, Q13), only 8% of responses for TGSs were social reasons, while 53% of the responses for PPM were social.

When interviewees described how they decided what to buy (Q8, Q14), 37% of TGS responses were impulse, while 50% of PPM responses fell into that category. Interestingly, the response "Didn't buy anything" occurred only in the PPM set; a response that reinforces the social or non-laborious nature of the environment. It is difficult to imagine that very many people would go to their local TGS and not buy *anything*, unless the specific item wanted was unavailable.

For questions 10 and 16, Erdelez' model (1999) predicts that information acquired through encountering is expected to be just as useful to the subject as information that is expressly sought. The percentage of responses coded as either "used immediately" or "used later" confirms this: combining those two results, 87% of responses for the TGS environment indicated that information acquired was used either immediately or later. For responses for the

PPM environment, this number *rises* to 93%. For these twelve interviewees, it appears that the information acquired in an environment like PPM, an environment more amenable to encountering, is just as useful as information acquired in a TGS environment, if not more so.

This initial study data suggests that information encountering does occur more frequently in environments that are recognized by shoppers as more *socially* oriented than *practically* oriented. Because both types of grocery store shopping occur in information-rich environments, they can be placed along an information encountering continuum with TGSs located at the practical end and PPM on the social end. Additionally, PPM shoppers experience significant information encountering incidents in comparison to TGS shoppers.

Why might this be the case? Perhaps there is something about the social environment that influences people's information behavior differently than does the practical environment. In other words, a social environment may change the way people feel about the information that is present all around them and make them more receptive to encountering and retaining useful information.

SOCIAL-PRACTICAL ENCOUNTERING MODEL

When studying the differences between shopping at typical grocery stores and shopping at Pike Place Market, the concept that is clearly revealed is the notion of a "practical" everyday life versus a "social" everyday life. The practical everyday life world concerns the very nature of human existence: here are the tasks needed to clothe, feed, and shelter oneself. The information behavior in this world is largely seeking behavior, as people depend on the successful acquisition of critical "bits" of information to help them navigate their practical lives. Examples include seeking information to secure employment, find an apartment, obtain medical advice, or so forth. Because of the often important nature of these fundamental chores of existence, in this world

people are often focused on their immediate needs and are less receptive to encountered information that does not apply to the task at hand or is not perceived as relevant.

In contrast, the social everyday life world includes those things that make life enjoyable. An individual's hobbies, interests, and ways of spending free time are enhanced by the information they acquire, just as in their practical lives; however, information behavior in this world is quite distinct. Here, a person is more engaged with their environment and is more likely to interact with their surroundings. Because of this, individuals may be more receptive to encountered information in their social everyday world and may be more likely to save that information and use it later.

The Social-Practical model (Figure 1) that emerges from this study delineates everyday life information encountering, but can also be useful in explaining information encountering behaviors in other contexts. This model represents both the difference and the overlap between the practical everyday life and the social everyday life; demonstrates how information encountering may differ between the two worlds; and indicates that encountered information may be saved for future use. It also represents the practical everyday life world and the social everyday life world as two spheres that may overlap.

The practical everyday world is defined by a dashed line that represents how individuals interact with information. Some encountered information may be received and saved for later use by the individual; however, other information may be ignored, avoided, or not perceived as relevant and thus discarded. The social world has a dotted line that represents a more fluid approach to one's environment as well as a more receptive attitude toward encountered information. As the study demonstrates, in the social everyday life more information is encountered, more information is perceived as relevant, and more information is retained for

future use.

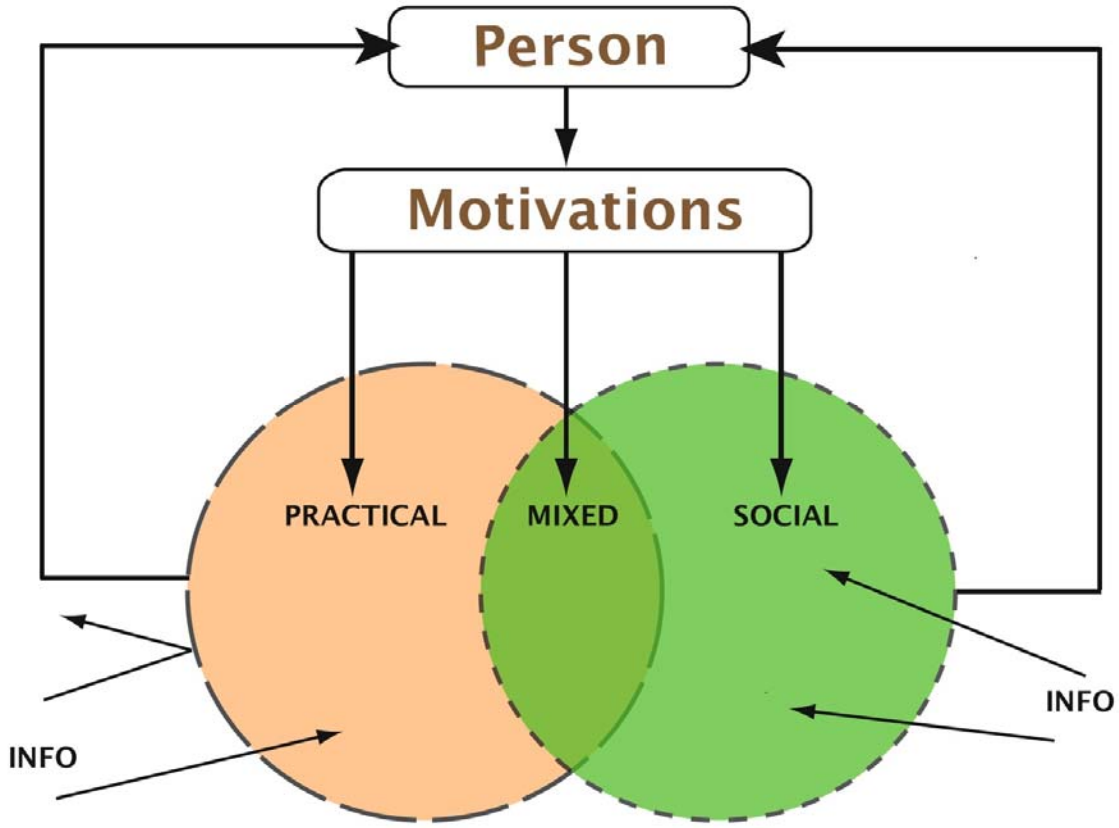

Figure 1: The Social-Practical Encountering Model

How did the grocery shoppers in this study match this information behavior pattern? Overwhelmingly, the study respondents had practical motivations for going to typical grocery stores. These reasons include the proximity of the store location to their home, product variety and quality found at that location, and price. These reasons show a practical everyday life orientation toward grocery shopping, which was validated by many interviewees describing grocery shopping as an unpleasant chore. Notably in this environment, the shoppers were less receptive to encountered information and displayed a greater indication of discarding encountered information.

Many interviewees provided social motivations for shopping at Pike Place Market, such as entertaining out of town guests. Thus, there was a social everyday life orientation toward shopping at Pike Place Market, which was validated by their comments pertaining to the fun, entertaining nature of the market. Additionally, some respondents provided both practical and social reasons for shopping at Pike Place Market. For example, the desire to entertain out of town guests coupled with the need to purchase fresh produce. The information behavior of these shoppers was also affected by the social dynamic of Pike Place Market: because of the greater interaction with people in the environment, all of the Pike Place Market shoppers were more receptive to encountered information, encountered more unexpected information, and indicated a higher rate of saving encountered information for later use.

Similarities exist between this Social-Practical Encountering Model and Williamson's Ecological Model of Information Use. According to Williamson, "people find information unexpectedly as they engage in other activities" (1998, p. 24) and she uses the term *incidental information acquisition* to describe this phenomenon. This incidental information acquisition (IIA) refers to information people acquire when monitoring their worlds. However, Williamson focuses on the process of encountering information when monitoring the world, and excludes the process of encountering information when searching for something else. For example, her studies on elderly populations specifically examine how they encounter information while monitoring their world, while ignoring job or task related information encountering. In contrast, the respondents in the current study were engaged in the task of shopping.

While the Social-Practical Encountering Model shares similarities with Erdelez's Information Encountering model (1999), it differs from hers in that Erdelez does not discuss how social dynamics might affect a person's receptiveness to encountered information. Additionally,

the Erdelez model does not explain how social environments can affect retention and use of encountered information. Instead, Erdelez defines information encountering (IE) as a specific type of opportunistic acquisition of information (OAI) whereby during a search for information on a specific topic, users stumble across information on an unrelated topic of interest (2004). In other words, IE is "stopping of information seeking activities for a foreground problem due to noticing, examining, and capturing of information related to some background problem" (p. 1013). Thus, when working on a foreground problem–for example, when a student is researching a term paper–the student may stumble across information that pertains to a background problem (such as course offerings for the next quarter) at which time the foreground and background problems switch positions. The student focuses on registration for the next term, pushing the research paper into the background.

For Erdelez, a typical IE episode consists of the following functional elements, but not necessarily all: *noticing*, or the perception of encountered information; *stopping*, the interruption of the initial seeking activity; *examining*, or assessing the usefulness of the encountered information; *capturing*, the extraction and saving of this new information for future use; and *returning*, to the initial seeking task (2000). However, the Social-Practical Encountering Model drawn from this grocery shopping study does not examine these individual elements of encountering; it instead examines how the phenomenon of information encountering is affected by social dynamics.

PRACTICAL IMPLICATIONS

Is it wise to build information retrieval systems without taking into account the full range of information behaviors? Must seeking be the only behavior considered during the development of new systems? Information seeking is perhaps the most straightforward behavior to design for;

however, as Savolainen notes, “[a]ll information is not received via systematic seeking [,] but a significant part of daily information may emerge accidentally” (1995, p. 272). For information professionals, neglecting this type of “monitoring” information behavior can mean missed opportunities to improve the user experience.

One library system that is taking advantage of this monitoring or encountering behavior is the King County Library System. From their main catalog page (http://catalog.kcls.org), users can click the “Catalog Explorer” button to interact with the online catalog in a revolutionary way. Powered by AquaBrowser Library, a traditional list of books is displayed after keyword(s) are entered into a familiar search box. However, the more serendipitous piece of this interface is a cluster map on the left side of the browser window, with the search term(s) in the center. Radiating out from that are other possibly related keywords, suggested by the system, that act as linked searches. The keywords introduced by the system may include spelling variants and translations from other languages (if any). As a user follows these links, the link they came from is displayed in the new cluster and is colored blue, not unlike leaving a trail of breadcrumbs.

This feature, called Discovery Trail, offers a way to leverage an initial encountering experience. For example, a user who enters the keyword “hour” into Catalog Explorer will receive a graphical web of the original search term linked to new, suggested ones; one such link might be for “manuscript”, leading the user to wonder about why that term was linked (“what does ‘manuscript’ have to do with ‘hour’”?). Following the new link, the user is led into a deeper exploration of the catalog, through a means less explicit than the traditional library catalog interface. Since the Catalog Explorer is provided in addition to the traditional interface, the results are not meant to be identical to traditional focused or active searches, and in fact do not bring up the same resources for the same keywords entered in the more traditional search

interface.

Grocery shoppers model this encountering behavior, and commercial websites trying to sell products make it easy for online shoppers to encounter additional information. For example, Amazon.com is very successful at exploiting encountering behavior with its on-page links of varying relevancies: for example, "people who purchased *x* also purchased *y*". As libraries' Online Public Access Catalogs (OPACs) begin to take their cues from successful sites such as Amazon, the boundaries between commercial sites and non-commercial sites will continue to blur. While libraries do not need to be Amazon (because Amazon is fulfilling that niche already), libraries *do* need to consider how to support their diverse user population by providing more pathways into their collections.

One additional pathway present in the Pike Place Market environment was its *social* atmosphere, something that many libraries are just now realizing is key to surviving into the future. For example, at the University of Massachusetts, the 28-story W. E. B. DuBois Library was a place where students didn't want to spend time, calling it "creepy" (Vaznis, 2006). After creating social spaces on several of the lower floors, relaxing strict rules about food and cell phone use, and redesigning physical spaces to accommodate these changes, circulation increased by 84% over the previous year's totals.

By pursuing opportunities to accommodate a full spectrum of information behavior, information professionals not only improve user-centered systems, but can potentially create a kind of "information experience" that users prefer: a kind of "brand choice" in what Emery (1993) describes as an increasingly competitive information world. In this way, those University of Massachusetts students, like the Pike Place Market shoppers, can get utility out of a more socially defined experience versus a more practically defined one. Encouraging encountering

behavior, either as part of a social environment or by making another gateway to information resources, can only improve the accessibility and usability of information retrieval systems.

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Appendix 1: Interview Questions

Hi, I'm _____, a Library student from the University of Washington. Thank you for agreeing to take part in this interview; it shouldn't take more than 30-45 minutes to complete. I'm working with a group of other students to investigate people's experiences in various settings, especially situations where they may "find something out". Our specific focus for this interview is on places where groceries may be purchased, including Seattle's Pike Place Market.

Your participation will be kept completely anonymous, and the results will only be shared with our classmates and instructor. Before we begin, do you have any questions?

Q1: First, your gender is:

Q2: And the age range you fall into is (choose one):

- 20-35 [CODE 01]
- 36-49 [CODE 02]
- 50+ [CODE 03]

Q3: How often do you go grocery shopping in a week? [CODE = NUMBER LISTED]

Q4: Where do you usually go to shop for groceries? [CODE 01= TYPICAL, 02= ATYPICAL]

Q5: Do you usually go by yourself, or in a group?

Q6: Please describe the store that you go to most often. [CODE 01 = PHYSICAL LAYOUT, 02 = PHYSICAL LOCATION, 03 = ECONOMICS, 04 = PERSONAL REACTION, 05 = PRODUCTS, 06 = STAFF]

For the following questions, please think about your most recent visit to this store.

Q7: Why did you decide to shop there?
[CODE 01 = PRACTICAL, 02 = SOCIAL]
Q8: How did you decide what to buy once you were there?
[CODE 01 = PLANNED, 02 = IMPULSE]
Q9: Who did you talk to?
[CODE 01 = EMPLOYEES, 02 = OTHER CUSTOMERS, 03 = OWN GROUP, 04 = NOBODY, 05 = BUSKERS/PANHANDLERS]
Q10: What types of interesting things did you find out about when you were there?
[CODE 01 = EXPECTED, 02 = UNEXPECTED]
Q11: Please describe how you followed up.
[CODE 01 = USED IMMEDIATELY, 02 = USED LATER, 03 = DIDN'T USE/WOULDN'T USE]
For the next questions, please think about the last time you shopped for groceries at Seattle's Pike Place Market.

Q12:Do you usually go by yourself, or in a group?

Q13: Why did you decide to shop there?
[CODE 01 = PRACTICAL, 02 = SOCIAL]
Q14: How did you decide what to buy once you were there?
[CODE 01 = PLANNED, 02 = IMPULSE]
Q15: Who did you talk to?
[CODE 01 = EMPLOYEES, 02 = OTHER CUSTOMERS, 03 = OWN GROUP, 04 = NOBODY, 05 = BUSKERS/PANHANDLERS]
Q16: What types of interesting things did you find out about when you were there?
[CODE 01 = EXPECTED, 02 = UNEXPECTED]
Q17: Please describe how you followed up.
[CODE 01 = USED IMMEDIATELY, 02 = USED LATER, 03 = DIDN'T USE/WOULDN'T USE]

Now I'd like to ask you to compare your experiences where you usually shop to your experiences at Pike Place Market.

Q18: Please compare the physical environment of the store where you usually buy groceries and Pike Place Market.

Q19: Please compare what you found out at the store where you usually buy groceries to what you found out at Pike Place Market.

Q20: Please compare the time you spent talking to people in the store where you usually buy groceries to the time you spent talking to people at Pike Place Market.

Note: All codes developed ***after*** analyzing response categories.

Appendix 2: Data Charts

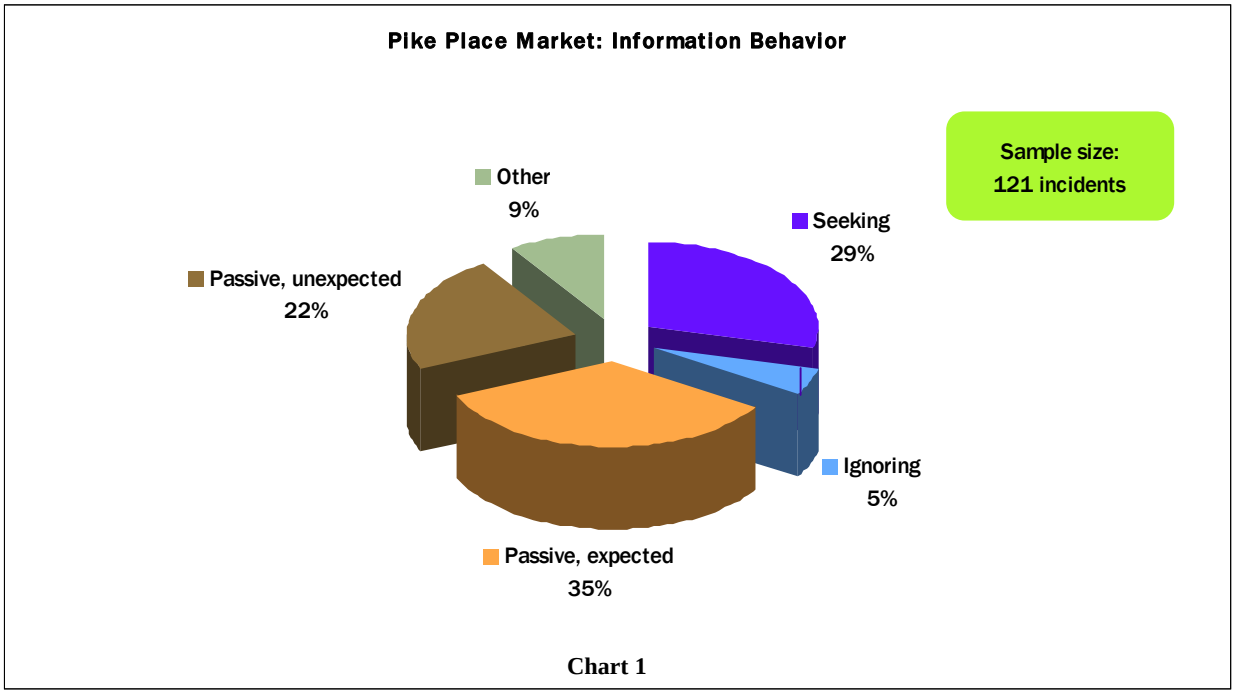

Chart 1

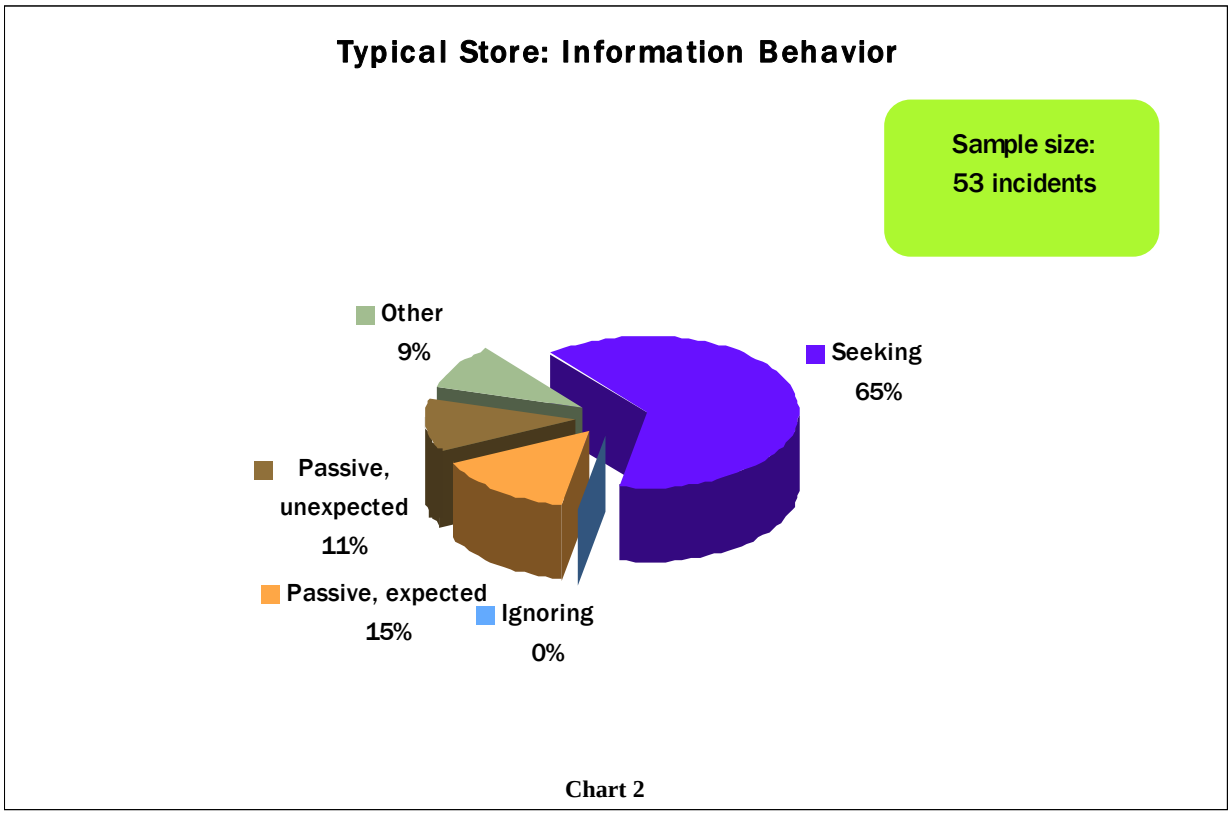

Chart 2

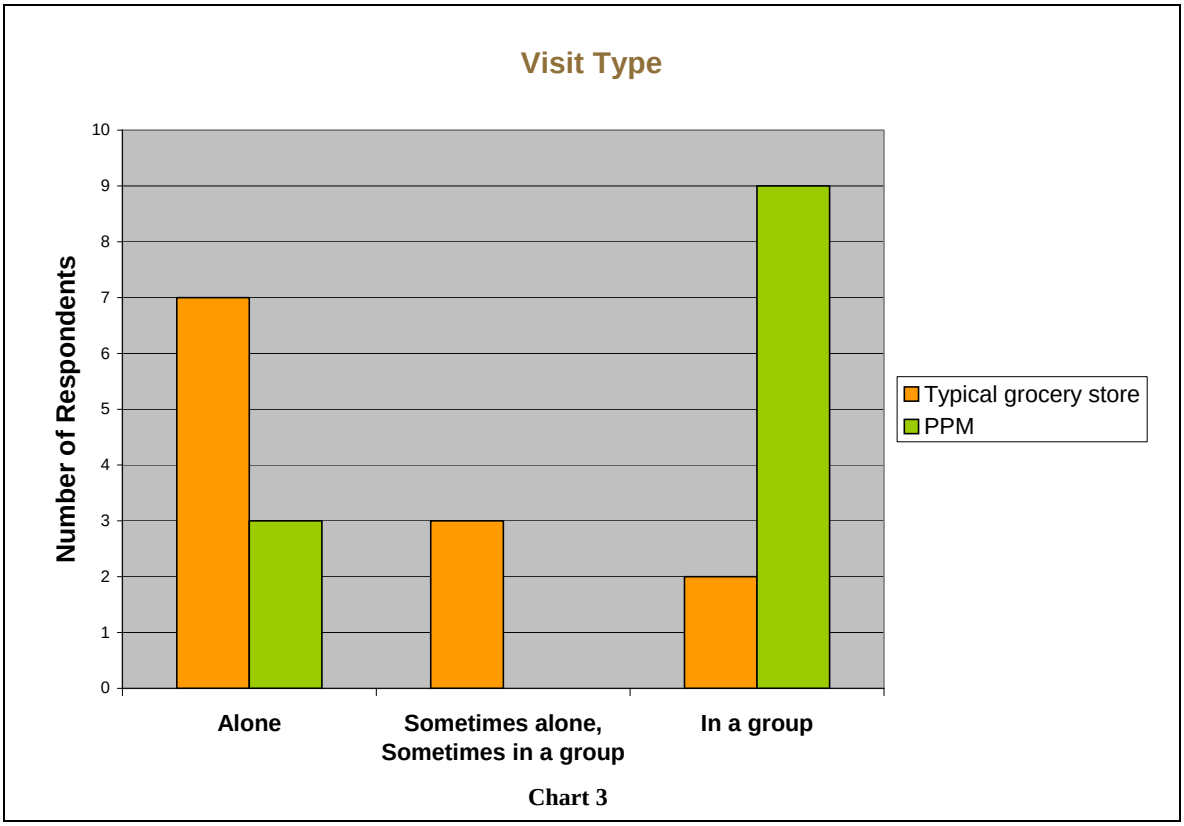

Chart 3

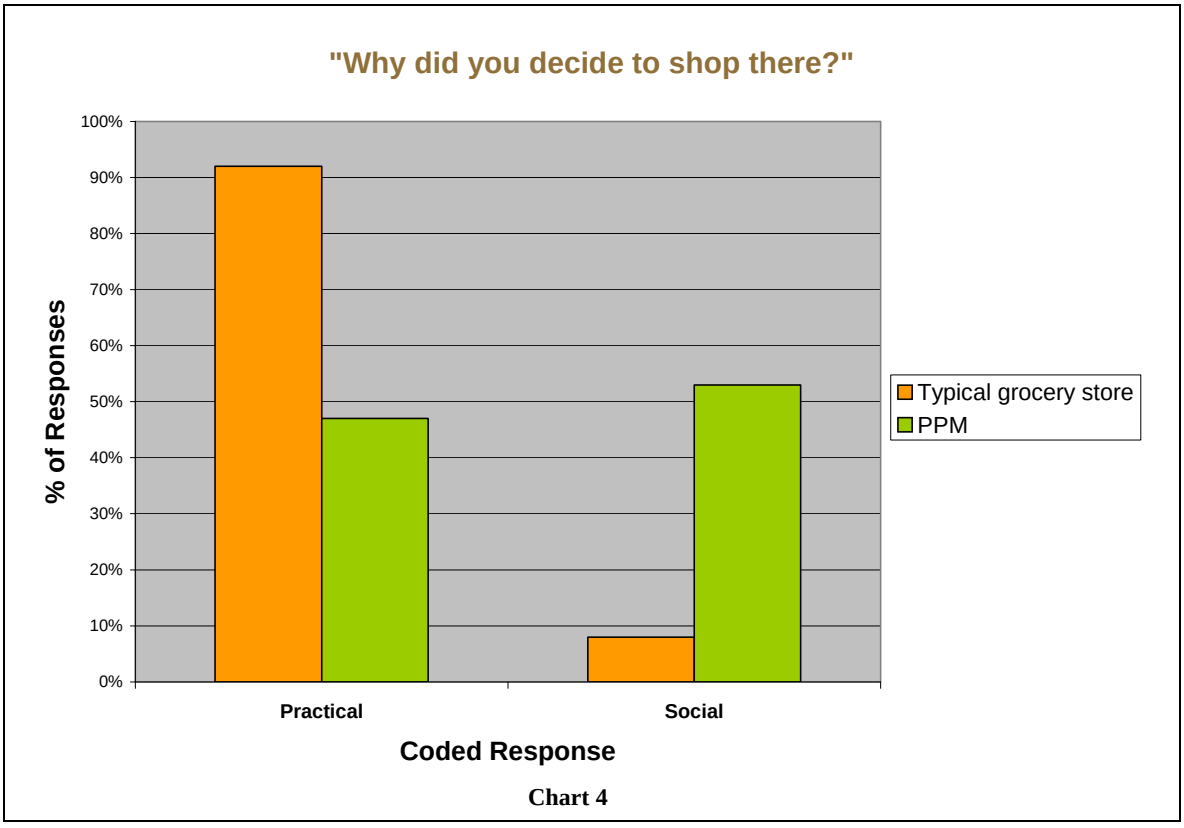

Chart 4

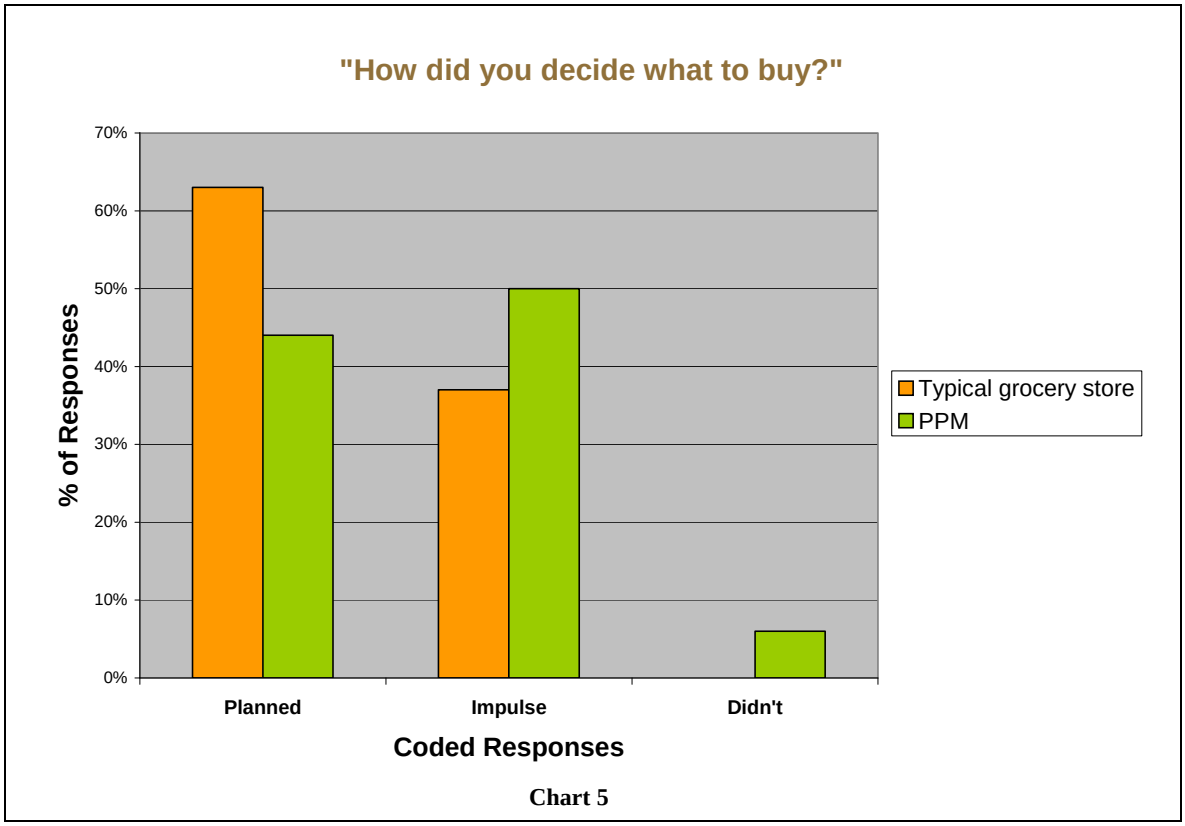

Chart 5

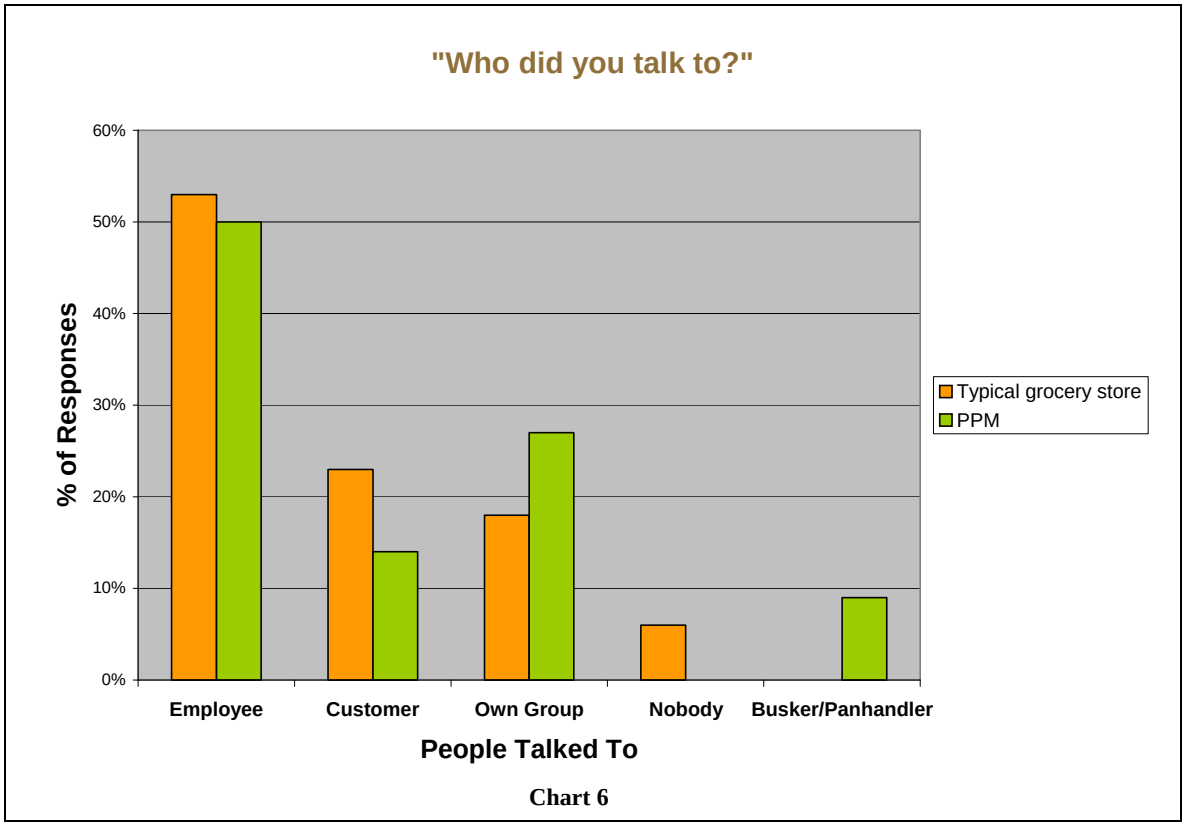

Chart 6

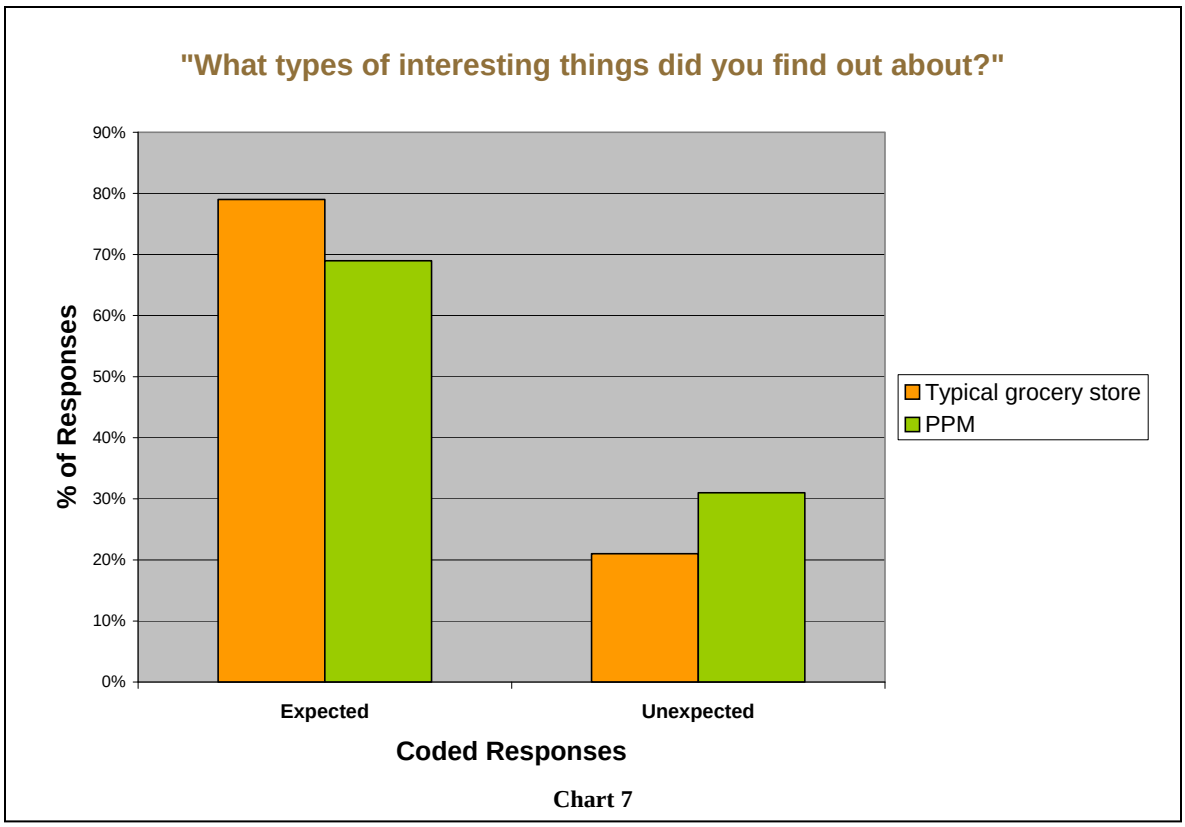

Chart 7

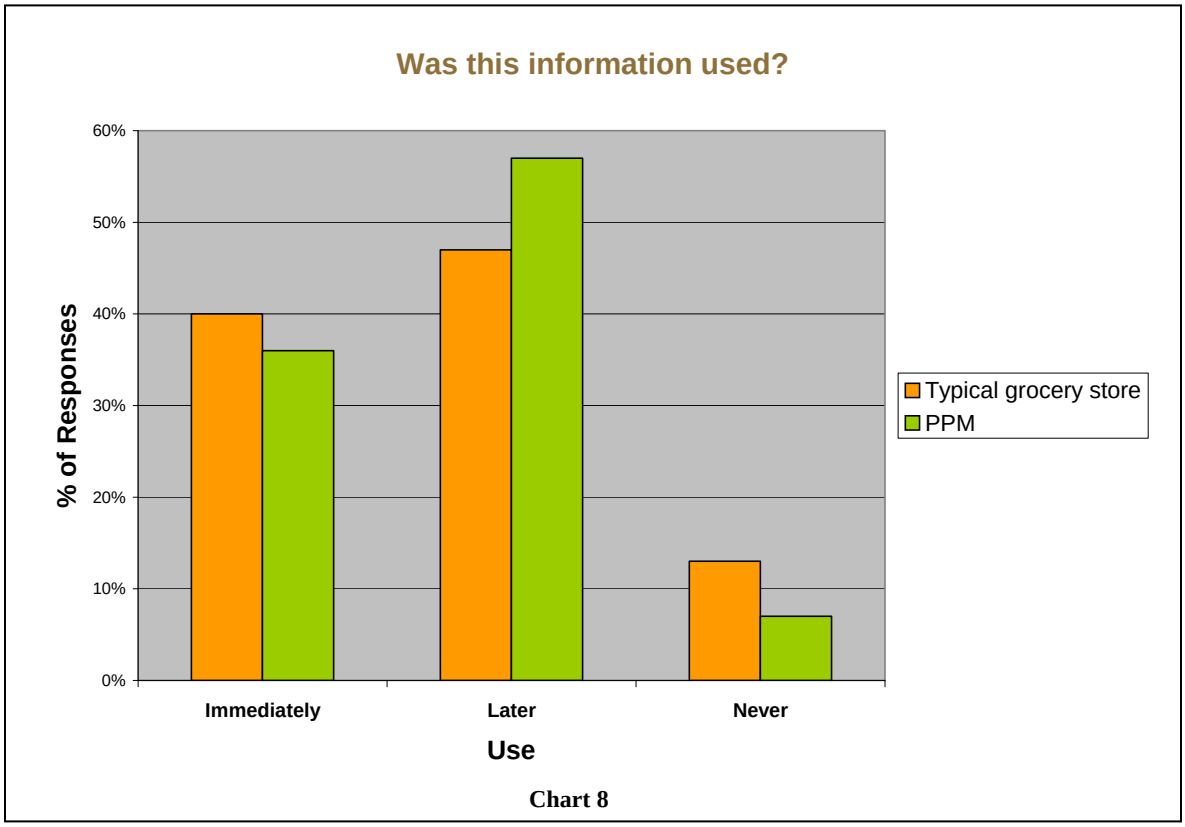

Chart 8