INFORMATION SEEKING IN CONTEXT: AN EXPLORATORY STUDY OF INFORMATION USE ONLINE BY eBAY ENTREPRENEURS

by

Linda L. Lillard

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AN ABSTRACT OF THE DISSERTATION
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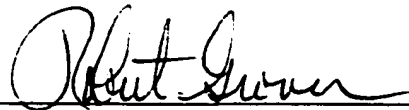
Linda L. Lillard
_____
(Name of Student)

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Title: Information Seeking in Context: An Exploratory Study of
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Abstract approved: _____
Nancy Pickering Thomas, Chair

This study explored entrepreneurship within the context of the online auction eBay to determine how this population locates and uses information. Following assumptions of the interpretive paradigm and a grounded theory methodology, the investigator conducted two online focus groups, 31 online interviews, and document analysis on information resources on the eBay web site over a period of four months. Social constructionism, role theory, and the theory of bounded rationality provided theoretical frameworks, and Taylor's model of the Information Use Environment provided a structure for data analysis and presentation. This dissertation extended Taylor's work by studying the information use environments of entrepreneurs while suggesting several additions to Taylor's model that more accurately portrayed online entrepreneurs operating in the eBay context. According to Taylor, individuals entering a profession are "socialized" into a common stock of knowledge, which creates for them specific roles. eBay informants, with diverse educational backgrounds and varied life and business experiences, lacked this sort of entrée. Their information behavior can be understood in terms of Simon's theory of bounded rationality since their lack of knowledge prevented awareness and use of available information resources. Organizational, eBay-generated rules and unwritten rules of the informants also enabled and constrained actions and behaviors within this environment, including information behaviors. Study results indicated major problems experienced by informants were related to technology, though problems changed with more experience working in this environment. The predominance of females parallels research suggesting that women choose entrepreneurship because they desire challenge and self-determination, a balance of family and work responsibilities, and career advancement. Taken together, the problems, problem resolutions, and information behavior of the study informants closely resembled models of organizational socialization described in the business literature. A model based on the data shows the importance of

studying individual information seekers in the context within which they operate when information is sought rather than in isolation.

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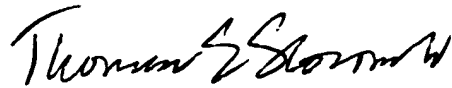Dean of the School of Library
And Information Management

_____
Dr. Nancy Pickering Thomas (Chair)

_____
Dr. James M. Nyce

_____
Dr. Howard Rosenbaum

_____
Dr. Thomas E. Slocombe

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Dean of Graduate Studies and Research

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TABLE OF CONTENTS

vi.

ix.

x.

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Background of the Study

Internet expansion and shrinking costs in the technologies required to access it have made information available to a rapidly growing audience of online information seekers. Whether accessed from home, a public library, or other information agency, information is abundant. As might be expected, the information explosion has had an enormous impact in the world of business.

Although information has always been an important aspect of commerce, in the past it took more than information alone to engage in business activities. Traditionally, land, labor, and capital were key prerequisites for and ingredients of business ownership; for would-be entrepreneurs, the lack of these prerequisites has often constituted a barrier.

Thanks to the information available online, it is now possible for a new breed of entrepreneurs to launch successful small business enterprises without what traditionally have been seen as the *sine qua non* of business success: capital investment and labor (Cleveland, 1985). The result has been the emergence of many Internet-based small business ventures. This trend reflects overall investment trends and support for small business, which, in 1997, contributed 47 percent of all sales in the United States (Gross, 1998). Indeed, with the Internet as its

critical backbone, electronic commerce (e-commerce) is emerging as one of the most dynamic applications of information technologies at a faster rate than anyone thought possible (Venkatraman, 2000).

While the authors of a 1995 book titled *Making Money on the Internet* asserted that a home page on the World Wide Web was the ultimate tool available to a business interested in making money online, they also asserted that there was little evidence of web-based fortune-making. Glossbrenner and Glossbrenner (1995) also claimed that few businesses had managed to generate enough business to pay for the cost of creating and maintaining their Web pages. Stories of fortunes won and lost online continue to surface, but as is the nature of the Internet, things change rapidly, so that a new business on the World Wide Web today might make a fortune by next year or disappear in a week. Only time will prove or disprove the efficacy of online businesses. Consequently, while the long-term impact of e-commerce is anything but clear at this point, new opportunities continue to emerge. Traditional businesses are attempting to convert their current ventures to the online world without enhancements, while start-ups are implementing new processes and products utilizing new technologies (Amor, 2000). According to Kalakota and Whinston (1997),

> under relentless pressure to reduce costs and stay competitive, firms are attracted to the economic efficiencies offered by electronic commerce. These economic efficiencies include low-cost

technological infrastructures that reduce the cost burden of

technology upgrades and obsolescence, low-cost and accurate

electronic transactions with suppliers, the low cost of global

information sharing and advertising, and the ability for firms to

provide low-cost customer service alternatives to expensive retail

bank branches and telephone call centers. (p. 8)

At the same time, economists Shapiro and Varian (1999) warn executives

attempting to convert their ventures to the online world to continue to

heed basic economic principles rather than relying on new trends and

buzzwords to guide their "information age" strategies. They argue that,

although technologies may change, economic laws do not.

The Electronic Commerce Phenomenon: The Online Auction

Perhaps nowhere has Internet-based entrepreneurship been more

visible than the eBay auction, "the world's online marketplace." On eBay

it is possible for people with a few items of inventory and little experience

to create and maintain profitable small business enterprises. Kaiser and

Kaiser (1999) describe the process in this way:

some sellers start by using eBay to weed out their collections or

sell stuff that's cluttering the house. A few decent sales motivate

folks to think about using eBay to expand their income. There are

even sellers who have quit their day jobs to enjoy the eBay lifestyle.

(p. 119)

eBay has taken advantage of the uniquely interactive nature of the Internet by providing a place where people can not only buy and sell, but also come together as a virtual community. The "community" aspect of eBay is significant because, as an article in *Business Week* relates, those who participate in virtual communities as a part of conducting business in cyberspace are more likely to come back week after week ("Making Money on the Net," 1996). eBay's virtual trading community provides a place where people who share similar interests have the opportunity to interact with each other (Kannan, Chang, & Whinston, 1998) through trading transactions or through the various community areas provided at the website

It seems that many people have taken advantage of this opportunity. In 2001, there were 27.9 million registered eBay users, all potential entrepreneurs, while in the year 2000, the value of eBay transactions exceeded 5 billion dollars (eBay Company Overview).

Information and the Entrepreneur

Both academic journals and business journals depict business startup as a time of chaos, while suggesting that information plays a key role in the successful creation and maintenance of fledgling businesses. Nelson (1987), for example, argues that entrepreneurs usually grasp at information from the most convenient sources during this period of economic turmoil. Research findings in the area of marketing theory

suggest that people seek information from a variety of sources when faced with risk or uncertainty (Yeoh, 2000). What, one might ask, could be more risky or uncertain than creating and maintaining a new business? Lack of experience (Cooper, Folta & Woo, 1995) and lack of technical and business skills (Gnyawali & Fogel, 1994; Nelson, 1987) are proven deterrents to successful creation and maintenance of a new business. These gaps are often cited as factors that motivate people to seek more information (Cooper, et al. 1995). Searching for information is cited as a prime task for entrepreneurs (Cooper, et al., 1995), although "there is some consensus that small businesses are not being well served in either the efficient use of information or in the provision of access to pertinent information" (Glynn & Koenig, 1995, p. 253). This begs the question, how do these new entrepreneurs find the information they need?

While most business start-ups have to contend with the same issues in terms of product development, marketing, inventory, customer service, and shipping, the advent of electronic commerce brings with it many new twists in the entrepreneurial mix ("E-Commerce Course," 2000, Spring). Numerous studies have been conducted to determine the information needs of traditional "bricks and mortar" entrepreneurs and the sources they use. Few researchers, however, have studied the roles that information plays in assisting online entrepreneurs, considered

what kinds of information and informational resources are most valuable, or why these are useful or valuable.

In 1991, Robert Taylor wrote a seminal piece on the contexts of information seeking and use. In his article, Taylor suggested that it is important to consider the user and the uses of information and to analyze "the contexts within which those users make choices about what information is useful to them at particular times. These choices are based, not only on subject matter, but on other elements of the context within which the user lives and works" (p. 218). Taylor has named these contexts "information use environments."

In his study, Taylor identified four sets of people for research attention: the professions; entrepreneurs; special interest groups; and special socioeconomic groups. However, when exploring information use environments within the context of this model, Taylor limited his research focus to three environments from the professions set. This dissertation aims to extend Taylor's work by studying the information use environments of entrepreneurs, a group Taylor thought to be of interest and importance. Specifically, the study will explore entrepreneurship as it is understood online, within one particular type and site of online business activity, the online auction eBay.

Statement of the Problem and its Value to Library and Information

Studies

The changing information environment inherent in today's

"information society" creates new scenarios for information access and

use in all social settings, and with them, concomitant demands for new

information formats, systems, and new understandings of information

seeking and use. In addition, "electronic businesses also wrangle with

continually evolving methods of information delivery, as infrastructures

improve or technology changes" ("E-Commerce Course," 2000, Spring, p.

4). The explosive growth in the number of databases has made

information overload a common challenge, while the complexities of

searching online sources and determining the relevance, completeness,

and credibility of the information they provide pose major problems

(Kannan, et al., 1998). Another important issue, according to Kannan, et

al. (1998), "concerns the lack of a clear understanding of the new

communication process and how online respondents think and interact

with the electronic medium. Many attributes of a face-to-face interaction

with respondents are missing in the electronic medium" (p. 7). Without

an understanding of information seeking and use in an ever-changing

information world, design of useful information systems and reasonable

utilization of information is not possible (Vakkari, Savolainen, & Dervin,

1997).

Several studies show that traditional "bricks and mortar" entrepreneurs prefer to seek information from face-to-face sources (Young & Welsch, 1983; Yeoh, 2000). Similarly, managers, one of the many roles assumed by entrepreneurs, prefer oral communication as a means of transferring information (Achleitner & Grover, 1988; Yeoh, 2000). Consequently, it will be interesting to determine whether entrepreneurs working in an online environment have similar preferences. At present, there is little in the way of research data on independent information seeking online, nor has systematic research attention been paid to the area of online information service provision. In addition, there are few studies that consider the experience of online entrepreneurship, the meaning it has for those who are involved with it on a daily basis, and the ways in which these online entrepreneurs satisfy their information needs.

The information context represented by online entrepreneurship is of potential value to scholars in library and information studies (LIS) because of the light it may shed on online information seeking in general and business information seeking in particular. Identifying the resources that online eBay entrepreneurs consider valuable and the rationale for their use can assist information professionals in the design of information resources for people attempting to conduct any type of business online. In addition, developing an understanding of the

contextual rules that enable and constrain the use of these resources can also enhance the design process.

My interest in the research is tied to my experience both as an information professional and as an entrepreneur with some experience in e-commerce. I continue to be intrigued by the role of information in entrepreneurial decision-making, the kinds of information entrepreneurs find most useful to this activity, the ways in which this information is accessed and used, and the barriers and constraints entrepreneurs experience in their search for information.

Other research communities, ranging from Human-Computer Interaction (HCI) to cognitive science, are also examining issues relating to information seeking and use. Dillon (2001), a researcher in HCI, is interested in the human response to information technology, specifically seeking to find "why some people learn to use systems easily while others seem to struggle" and "how we can best study humans in order to envision technologies that enhance our lives" ("Current research, paragraph 1). He is also concerned with information architecture and the navigation problems encountered by users of large digital environments, mentioning that users may have a negative and disorienting experience when their expectations for organization are violated.

In a discussion of information and communication technologies (ICTs), Rosenbaum (1999) states that "peoples' work practices are

becoming increasingly intertwined with the ICTs that support these activities in ways that are complex and difficult, although important, to understand (Importance of the Social Context section). Rosenbaum (1999) is concerned with the digital information environment, which he describes as "a source of the typical information-based problems faced by people in social and organizational settings as they design and use ICTs and digital information, and of the features of acceptable resolutions to those problems (The Digtal Information Environment section). Digital information and ICTs constitute the resources in this environment, but use of these resources is enabled and constrained by both the technical and social rules of a particular environment.

In 1995 Marchionini asserted that "electronic systems have begun to change users' expectations about what is possible in an information society" (p. 99). He believed that the more electronic information systems became available, the more we would change the way we think about and react to information. At that time, Marchionini believed that it was too early to say how much and in what ways information-seeking patterns had been altered by electronic environments. Six years have passed since Marchionini made this statement. It may be that this is a good time to begin this exploration.

Research Questions

In order to describe the information use environment of online entrepreneurs, it is useful to understand the kinds of activities that

engage this population and the impact information has on these activities. The following research questions will guide this study:

1. What is the experience of online entrepreneurship as it is understood by those who engage in online business activity?

2. What do participants say about the role(s) of information in entrepreneurial activity and decision-making?

3. What information sources and resources have online entrepreneurs found the most useful and how has that information been used—in other words, where do online entrepreneurs go for their information?

4. What formats of information have online entrepreneurs found the most helpful and why?

5. What kinds of problems, if any, have online entrepreneurs encountered in retrieving the information they have found helpful or useful?

6. What rules have enabled and/or constrained access to information that online entrepreneurs deem to be helpful or useful?

In sum, this dissertation will look at the role of information in entrepreneurial decision-making within the context of eBay online auctions to determine how this population locates and uses information.

This chapter has provided an introduction to this dissertation and includes the background of the study, a statement of the problem, and

research questions. Chapter 2 sets forth the theoretical framework that guides the study. Chapter 3 reviews the relevant literature. Chapter 4 delineates the research methodology, the sample population, and the techniques used to collect data. Chapter 5 presents the results of the data collection and its analysis. Chapter 6 includes an analysis of the data, the conclusions reached from this study, and recommendations for further research.

CHAPTER 2

THEORETICAL FRAMEWORK

The information needs of online entrepreneurs can be viewed as arising from the experiences of a person who assumes the role of online entrepreneur and all of the sub-roles it encompasses. In order to adequately describe these experiences, this study was conducted through the process of qualitative inquiry. This means that the study was conducted in a natural setting--in this case the eBay online auction--and is an attempt to present a complex, holistic picture of the information use environment of online entrepreneurs from their point of view (Creswell, 1994). Understanding entrepreneurship from the point of view of the entrepreneur assumes a social constructionist perspective. The social constructionist viewpoint assumes that meaning is contextual and only understandable with the boundaries of specific places and (Littlejohn, 1996).

Role theory adds another dimension to this framework. In the present instance, entrepreneurship is considered to be a role that is made up of a variety of sub-roles. As participants in the social world, we play many roles throughout our lives and even throughout any given day. In many traditional cultures, people are conceptualized as the embodiment of a role and in general are seen as manifestations of these roles, such as mother, father, or worker. Role theory suggests that individuals gain access to specific sectors of the common stock of

knowledge, which can be described as "typifications, recipes and formulas for accomplishing particular tasks, and commonsense understandings and theories that are shared by members of a group" (Keel, 1999), because of the roles they play (Berger & Luckmann, 1966). Independent information seeking and social interaction with other members of this role set are methods that new entrepreneurs may employ in learning what they need to know to enact the role successfully. However, how do new online entrepreneurs search for information when they don't even know what exists in this new and unfamiliar domain? The theory of bounded rationality, most often used in the study of organizations, provides a way of understanding the information search process itself.

Social Constructionism

As my exploration of the information use environment of online entrepreneurs seeks to describe the experience of online entrepreneurship as it is understood by those who engage in online business activity, it is important to recognize that these understandings are constructions arising in communication with social others (Littlejohn, 1996). Such a view acknowledges that communication is always a work in process—ongoing and ever changing (Littlejohn, 1996).

Noting the importance of "context" in understanding information behavior, Taylor (1991) explained that information "choices are based, not only on subject matter, but on other elements of the context within

which a user lives and works" (p. 218). In this study, the context of the online auction is the

> space, background, or 'surround' within which users act, make decisions, evaluate, and use information and a manifestation of the ordinary contexts of practical action, and information behaviors because they are manifestations of the praxis of information and are forms of practical action in which users are routinely engaged. (Rosenbaum, 1996, p. 41)

Communication and information are critical to the perceptions and cognitive activities of individuals and contribute to personality development, self-expression, self-reflexivity, self-monitoring, problem solving, and decision-making (Mokros & Ruben, 1991). Harré's work is concerned with the ways in which communication and information contribute to the development of the individual (Littlejohn, 1996). Harré examines the social construction of self, recognizing that the self is both individual and social, and emphasizes how individuals explain their behavior in particular episodes. He believes that the self is understood by a personal theory that the individual uses to define and structure the self. A delineation is made between the self, which is a private notion, and the person, which is a publicly visible being that possesses all attributes and characteristics of persons in general within the social group or culture. There are two aspects to the personal being—a social being (person) and a personal being (self). The character of persons,

Harré asserts, is governed by a group theory of personhood, while the self is governed by the individual's idea of himself as a member of the culture (Littlejohn, 1996). The importance of the communication-information relationship is also evident at this group level as it is responsible for the development of relational networks, role responsibilities, themes, and images (Mokros & Ruben, 1991).

Roles

This typification of our own performance and that of others is important to any social order. Segments of the self are objectified in terms of these socially available typifications that we call roles. When this typification takes place in "the context of an objectified stock of knowledge common to a collectivity of actors" (Berger & Luckmann, 1966, p. 69) we find that we have roles. When playing these roles, which are an essential part of any society, the individual is participating in the social world (Berger & Luckmann, 1966).

Individuals are inducted into specific sectors of the common stock of knowledge because of the roles they play. The knowledge is not simply the cognitive sense of knowledge but also knowledge of norms, values, and emotions. Berger and Luckmann (1966) assert that to be a judge not only involves knowledge of the law but also a range of human affairs that are considered legally relevant. Values and attitudes that are appropriate for a role of a judge and those roles closely associated with that of a judge, such as a judge's wife are also a part of this knowledge.

Emotional knowledge relevant to the role of judge is also a portion of this common stock of knowledge.

To learn a role, it is not enough to acquire the routines immediately necessary for its "outward" performance. One must also be initiated into the various cognitive and even affective layers of the body of knowledge that is directly and indirectly appropriate to this role. This implies a social distribution of knowledge. A society's stock of knowledge is structured in terms of what is generally relevant and what is relevant only to specific roles (Berger & Luckmann, 1966, p. 72).

Role Theory

Entrepreneurship can be considered a role that an individual may choose to assume, and entrepreneurship itself is made up of a variety of additional roles, though what these additional roles are may vary according to the perceptions of the individual. According to Biddle and Thomas (1966) the role analyst is interested in describing human behavior by examining patterned forms of complex real-life behavior. He asserts that

> Individuals in society occupy positions and their role performance
> in these positions is determined by social norms, demands and
> rules; by the role performance of others in their respective
> positions, by those who observe and react to the performance; and
> by the individual's particular capabilities and personality. (p. 4)

Individual behavior, he further asserts, is controlled by the immediate social environment of the individual and is shaped by the demands and rules of others and by the individual's own understanding of what this behavior should be. Because individuals may be members of many different groups such as families, work groups, school groups, organizations, communities, and societies and have a role within each of these groups, role theorists study these determining factors within these group contexts (Biddle & Thomas, 1966). Consequently, the role of an individual within a group carries with it expectations of certain behaviors, although the unique capabilities and personality of the individual may add a slightly different twist. For example, people in the role of teacher are expected by others to exhibit certain behaviors as requirements of this role. The way this is accomplished will differ from one individual to another.   Biddle and Thomas (1966) further assert that even though there are individual differences that will affect the performance of a role, social determinants may have created these differences.

The importance of roles is stressed by Perlman (1968), who asserts that when a new adult person is first encountered by another member of society, the first reaction is to ascertain the status and role of that person to find where he or she fits into adult society. In fact, she states, this "seems to be the essential orientation we need in order to go forward with our relationship" (p. 38). Differentiation is made between the types

of roles the individual may perform by dividing them into transient, time-limited roles such as the role of a bus passenger, hostess, or committee member, and those roles to which individuals commit themselves wholly and deeply. Transient roles, she states, touch nothing beneath the skin and are not vital to the personality. Role is a recognized social position that is carried into action by an individual and simply suggests that human behavior is socially patterned. The requirements and expectations of a role are finely prescribed, specifically demanded, and heavily charged with pressure not in the interplay between the individual and society but between the individual and his own small social network and his role partners (Perlman, 1968, p. 40).

Heine (1971) maintains that role conceptions redefine the person in terms of what he does, meaning that the person is actually the sum of his roles. Personality, however, explains the variances in the role since "the behavior of the person is to be understood not just by expectations and role definitions (imposed from outside) but as an expression of self (from within)" (Heine, 1971, p. 95). As a result, the performance of a particular role may vary greatly depending on the degree of freedom of emotional expressiveness, style, and adherence to or departures from conventional norms that is permitted to the individual.

"When an individual enters the presence of others," according to Goffman (1959), "they commonly seek to acquire information about him or to bring into play information about him already possessed" (p. 1). To

begin with, the kinds of information they would like to acquire are the person's general socio-economic status, conception of self, attitude toward them, competence, and trustworthiness. The practical reason for acquiring this information about an individual is that it helps to define the situation, thus enabling them to know what that individual will expect of them and what they may expect of him or her. This allows one to know what actions will bring forth a desired response from this new individual. Furthermore, Goffman (1959) states that there are many signs available to convey this information, and if unacquainted with the individual, the observer may see clues in that person's conduct or appearance. The observer can utilize these clues to recall prior experiences with similar individuals and to apply those experiences to the new situation.

Role theory, as a model of socialization, human nature, interaction, behavior, and learning, seeks to explain how we acquire roles thus learning how to become persons. It is evident, then, that role theory is a way of explaining why and how human behavior is somewhat predictable.

Work as a Major Role

Perlman (1968) provides reference to a statement by Marlow, in Conrad's *Heart of Darkness*, that gives an overview of one major proposition of that essay. That proposition is that work, or an adult's occupational role, is a basic force in stabilization, development, and

sense of identity whether the individual likes that work or not. The effects of work can be negative when it undermines self-worth, damages motivation, or dulls the powers of mind and muscle; on the other hand, work can have positive effects when it expands and enhances a sense of identity, mastery, social worth, and competence. But, under both circumstances, work provides the individual with an anchor to the social system, an explanation of identity, a personal reality, and a linkage to other members of the social system. Perlman (1968) mentions Freud's statement that work has a greater effect than any other technique of living in the binding of an individual more closely to reality, because in work, a person is at least securely attached to that portion of reality called the human community.

Gergen (1971) asserts that various incentives such as financial gain, prestige, social conscience, and family approval may be offered that may influence an individual in the choice of one occupational role over another. He notes that "the greater the reward he is offered, the more rapidly should role identification take place" (p. 58). Within a framework of utility maximization, it is assumed that "people will almost always value more money and pursue profit" (Wallace & Wolf, 1995, p. 295). The question is whether they are following the most profitable course of action. The key to determining what would be the most profitable course of action is information.

It is no wonder then, that Patrick Wilson (1977), in *Public Knowledge, Private Ignorance: Toward a Library and Information Policy*, asserted that: "...it is hardly too strong to say that occupational role is the most important single clue to understanding personal information gathering" (p.50). Wilson further argues that for those who occupy a position or role in the work world, preserving and improving this position is of the utmost importance and, if the person enjoys this work, he or she will have concern about the work and the quality of that work. These conditions provide reasons for seeking information bearing on work performance and the maintenance and improvement of one's position in the work world. Wilson also refers to the predictability associated with roles as he makes the statement: "...the occupation one has strongly influences one's own and others' expectations of what else one will or should be concerned with and interested in" (p.50).

Bounded Rationality

Herbert Simon developed the theory of bounded rationality in the 1950's when he, along with others, found that "the micro-assumptions of rationality in the classical theory of the firm are contrary to fact" (Schwartz, 1989, p. 333). Simon (1959) argued that no existing evidence revealed that managers equate marginal costs and revenues or that consumers distribute their purchases so that they maximize their utility. Bounded rationality is concerned with the limitations of the decision maker and the environmental complexities (Schwartz, 1989). In his

theory of bounded rationality, Simon (1976) describes the economic man as one who selects the best alternative from among all those available to him, while he conversely describes the administrative man as one who satisifices. Satisificing, as defined by Simon, means determining a course of action that is satisfactory or "good enough" (p. xxix).

Information is a key resource for any new venture. Entrepreneurs gather information to assist them in identifying key opportunities and assembling the resources necessary to conduct the business they have chosen. The entrepreneurial information-gathering process has been described as "an iterative process in which they learn about the proposed business and the process of entrepreneurship as they proceed" (Cooper, Folta, & Woo, 1995, p. 108). An ideal situation would probably entail the entrepreneur gathering information on all possible alternatives and selecting the best alternative from all of those available to him, thus making a rational choice. It is quite possible, however, that he simply satisfices and selects the option that appears to be "satisfactory or 'good enough'" (Simon, 1976, p. xxix).

The theory of bounded rationality also recognizes the impossibility of comprehending and analyzing all potentially relevant information in making choices. The point is not that more or different information might result in a different decision, but that people could not process all of the information even if they had it. Consequently, decisions are not based on all information from all sources, but only on a subset of

possible information sources. The choice made can be called satisficing, which means that the choice was good enough or satisfactory, based on the limited or bounded rationality of the decision maker. Thus, in the process of predicting information-seeking activities, it is important to understand the cognitive process of choosing among different sources of information, not simply the amount and quality of information available. In the application of bounded rationality theory, for example, it is important to know not only what items a person values, but also what impacts the choice of a certain item in one case and a different item in another (Schmid, 1996). Because bounded rationality is concerned with the cognitive processes involved in information choice, it may prove to be a useful framework to view the information-seeking activities of online entrepreneurs.

The theory of bounded rationality, found most often in the business literature because of its implications for administrative and organizational decision-making, is converse to the principle of rational choice in which Harsanyi (cited in Homans, 1974) states

> in choosing between alternative actions, a person will choose that
> one for which, as perceived by him at the time, the value, V, of the
> result, multiplied by the probability, p, of getting the result is
> greater (p. 43).

Bounded rationality stems from what Gingrich (2000) finds as a weakness of rational choice theory associated with inadequate

information and uncertainty. These factors make it difficult for individuals to make rational decisions, which ultimately result in other ways of making decisions. One questions, then, how a person knows she has considered all alternative actions or has all relevant information, thus the theory of bounded rationality.

Cooper, Folta, and Woo (1995) use the framework of bounded rationality to explain the entrepreneurial information search. These researchers studied the information search practices of 1,176 traditional entrepreneurs and considered six widely used sources of information: accountants, friends or relatives, other business owners, bankers, lawyers, and readily available books and manuals. They found that, on the average, those with no previous entrepreneurial experience sought more information, but those who entered different fields or had higher confidence levels sought less information. Consistent with bounded rationality, new entrepreneurs searched less extensively in unfamiliar domains. Their limited knowledge created blinders or boundaries, thus bounded rationality.

Thomas (1999) comments on research that notes the difficulties caused by a lack of background knowledge in information searching and claims that a successful solution depends on the ability to gain more knowledge on a particular topic. This lack of knowledge creates boundaries. The findings of a study conducted by Cooper, Folta, and Woo (1995) suggest that, consistent with the bounded reality model,

inexperienced entrepreneurs entering new fields lessen their information

search. This study further suggests that outside advisors might be

helpful in prodding these entrepreneurs to seek more information.

Bounded rationality theory also appears in the library and

information science literature. Chu (1994) examines an existing premise

of reference services, which supports the idea that there is one correct

answer for a reference question. He asserts that librarians frequently

make decisions based on incomplete information because the patron

often has difficulty describing a precise information need. Consequently,

librarians answer "their interpretation of the question based on a context

bounded by their knowledge and experience" (p.459). Chu further

asserts that there are many limitations on rationality such as the

sources at a particular library, time that can be devoted to searching for

materials, and the fact that all relevant materials will not be usable for a

particular student.

> It is hard to predict whether the value of the information that one
>
> finds will outweigh the time and energy spent tracking it down; nor
>
> is it possible to know the existence of all relevant materials that
>
> have been published or even all materials at one's own library.
>
> Thus, one has incomplete knowledge of not only available
>
> information but alternative methods of access. (Chu, 1994, p. 459)

Schwartz (1989) uses the theory of bounded rationality as a

framework to examine book selection and collection development. He

maintains that the assumption of classical rationality is "not appropriate for book selection and should be replaced by the concept of bounded rationality in a garbage can decision context, given our inability to deal with all facets of a choice situation" (p. 337).

To relate bounded rationality to entrepreneurship or new venture creation, then, this process:

> may be considered a special case of resource-based theory because a new venture has few if any stocks of resources other than the knowledge of the entrepreneur(s). This knowledge is in turn used in the acquisition, development, and application of other resources that will lead to competitive advantage and superior performance. (Chrisman, 1999, p. 42)

Because a main stock of resources is considered to be the knowledge of the would-be entrepreneur, she could be considered as operating under the conditions of bounded rationality, which is bounded by her previous knowledge. As stated previously, individuals are inducted into specific sectors of the common stock of knowledge because of the roles they play (Berger & Luckmann, 1966). If entrepreneurship is a new role for an individual, however, this induction would not have taken place. Without this induction into the common stock of knowledge relative to entrepreneurship, would-be entrepreneurs are bounded by a lack of knowledge of potential information and resources. "How can one search

for something he doesn't know exists? How will he recognize it when he finds it" (Kaish & Gilad, 1991, p. 48)?

CHAPTER 3

RELATED RESEARCH

Examining the information-seeking strategies of people working in online communities can bring a new perspective to those attempting to design services to meet their needs. Simply translating previous methods of providing information to people working in the traditional face-to-face world with few changes may not suffice for this new group of workers. In an attempt to investigate information-seeking strategies and information use of people working online, this dissertation examined the role of information in the entrepreneurial decision-making process of online auction sellers working in the eBay online auction community.

Creators of the eBay auction have attempted to create an online community by providing an information-rich environment for their constituents. Whether this environment can be used as a model for other online working communities can only be determined by studying how the group of people working in this context use information, how its use affects their concerns, and what sources of information and formats of information have satisfied their needs. Taylor's (1991) model of the Information Use Environment (IUE) provides a particularly useful framework for analyzing how people operating in a particular context make decisions about the kinds of information that are useful to them at particular times. The model supports Taylor's belief that these decisions are based, not only on the required subject matter, but also on the

elements and characteristics of the environment or context itself, and provides the vehicle to examine the set of people working in a particular context, the problems of this set of people, the setting itself, and problem resolutions.

In addition to Taylor's (1991) model of the Information Use Environment, several additional areas of the literature of library and information science inform my study. Because this study involved the role of information in entrepreneurial activity and decision-making and the methods online entrepreneurs employ to find information, the areas of human information behavior and information seeking from the user's point of view, information seeking in specific contexts, and information seeking in online contexts have special relevance. Most of the research on the information seeking and information needs of entrepreneurs, small business owners/managers, and executives is found in the business literature. This apparent gap in the LIS literature may account for the assertion in the *1995 Annual Review of Information Science and Technology* that "small businesses are not being well served in either the efficient use of information or in the provision of access to pertinent information" (Glynn & Koenig, 1995, p. 253).

Recent research focusing on the contexts of information seeking and use may hold some promise for improving the situation for this underserved population. Indeed, my examination of the information use environment of online entrepreneurs may contribute to this effort. There

are, of course, studies in other domains that center on the information needs and information seeking behavior of entrepreneurs and small business owners/managers. The majority of this research, however, looks at information-seeking activities as they relate to traditional "bricks and mortar" entrepreneurs rather than those whose information seeking is carried out online. Finally, a review of learning preferences may also shed some light on information seeking and use among online entrepreneurs because information users think and seek information in different ways, and this process will vary according to individual learning styles.

Taylor's Information Use Environment

Taylor's (1991) approach considers the user and the uses of information, thereby analyzing "the contexts within which those users make choices about what information is useful to them at particular times. These choices are based, not only on subject matter, but on other elements of the context within which a user lives and works" (p. 218). Taylor names these contexts "information use environments" and further asserts that these information use environments are "the set of those elements that (a) affect the flow and use of information messages into, within, and out of any definable entity; and (b) determine the criteria by which the value of information messages will be judged" (p. 218).

Taylor argues that groups of people operating in similar contexts have many similarities, no matter where they are geographically located,

and regardless of individual idiosyncrasies. Taylor further asserts that

"each of these groups has different kinds of problems over varying time

frames, different ways of resolving those problems, and consequently

differing information seeking behaviors" (p. 220).

Taylor's (1995) research is concerned with the information

behavior of different sets of people. Information behavior in Taylor's

terms consists of active searches for useful information that arise as a

result of doubts and problems experienced through various activities in

which different sets of people participate. Useful information, Taylor

believes, allows people to resolve their problems through clarification,

alteration, or actual solution. By describing a particular set of people,

their problems, the setting in which their problems occur, and acceptable

resolutions of these problems, in information terms, Taylor believes he

can create a model of their information use environment. Information

behavior is a result of the information use environment, specifically how

a certain set of people define their work, the types of problems that arise

in the process of this work, the kinds of solutions to these problems that

are acceptable, and environmental factors that facilitate or constrain

their problem solving. When examined in these terms, Taylor asserts, the

information behavior of lawyers would certainly be different from that of

teachers.

Sets of People

In order to examine the information behavior of a set of people, it is helpful to determine just how sets of people are defined. "Is a set of people established on the basis of some set of variables and then labeled A, B, or C? Or is a set of people established a priori in a historical or social sense, i.e., doctors, engineers, farmers, etc., and then these groups examined to determined their information behavior" (p. 222)? Taylor asserts that society has already made this distinction and that information services are provided accordingly. Professional education or occupation defines a particular set of people, influencing the information behavior that is unique to that group. Defining exactly what determines a set of people in terms of information behavior involves examining differences in demographic and nondemographic characteristics.

These sets of people are determined either by their professional education or their occupation. For the purposes of his model, Taylor has provided a division of four classes of people.

- The professions: engineers, lawyers, social workers, scientists, teachers, managers, physicians, etc.

- The entrepreneur: farmers, small businessmen, etc.

- Special interest groups: consumers, citizen groups, hobbyists, political action groups, ethnic cultural groups, etc.

- Special socioeconomic groups: information-poor, the disabled, minorities, the elderly, etc (p 222).

Furthermore, Taylor is only concerned with the first two classes he mentions, which are the classes associated with occupational role: the professions and the entrepreneurs, thus indicating the importance of occupational role to the study of information use and needs. Class three, special interest groups, consists of roles that are usually secondary to a person's occupational role, and class four, special socioeconomic groups, could be roles that are secondary to an occupational role or roles that preclude having an occupational role. While people may fall into several classes simultaneously, Taylor is concerned only with engineers acting as engineers or managers acting as managers.

Demographically, he is concerned solely with variables that will define the information environment and behavior of the professional and entrepreneurial classes. While the demographic variables of age, sex, marital status, and race may have some effect on individual information behavior, Taylor believes that these variables do not significantly affect the hypothesis that certain predefined categories of people have different information behaviors than others. He also believes that socioeconomic status would have little effect on information behavior, although it could affect an entrepreneur's access to information.

Education, Taylor asserts, seems to have the most significant effect. He goes on to look at two different aspects of education. First, he discusses professional activities that are controlled by formal education, such as lawyers, physicians, and the others listed in his class one. He

maintains that other activities, which are also referred to as professions, such as his entrepreneurs in class two, are "less dependent on formal education and are more defined by context and the kinds of problems faced: farmers, managers, legislators, small business persons" (Taylor, 1991, p. 223). Level of education may have some bearing on the activities of small business persons, however, because they need skills such as accounting and marketing. Since there are no formal certifying processes for these kinds of practitioners, no formal problem recognition procedure or information behaviors are learned through formal education as they are in the formal professions.

The non-demographic variables Taylor believes are important for his purposes are media use, social networks, and attitudes toward new technology, education, risk taking, and innovation. He mentions how different professionals fit with these variables, citing studies that show scientists to be print-oriented and regular readers of periodical literature; engineers to use trade journals and textbooks more than they use professional engineering journals; and managers to prefer face-to-face meetings or the telephone over any other communication channels. He also notes how these same people use networks, and he analyzes their attitudes toward new technology, education, risk taking, and innovation. Missing here is any discussion of the second class of people Taylor indicates he is concerned with in his study, the entrepreneurs.

Problems of Sets of People

Taylor begins his discussion of problems with three questions:

"What are the characteristics of typical problems that this particular set of people is concerned about? Do these problems change over time? If so, how?" (p. 224).

Each information use environment has a discrete class of problems as "clients or users are perceived as a set of problems generated by a particular environment..." (p. 224). These problems are not static and are brought about by the particular setting and by the demands of a particular profession, occupation, or life style. Taylor also mentions that problems have dimensions. He defines these dimensions as "...a more formal set of characteristics each of which illuminates the criteria for judging relevance of response" (p. 225) and believes that each dimension would "...appear to have—though this has not been experimentally validated—an effect on the kinds of information deemed useful" (p. 226). He has noted 11 different dimensions, but lists the more significant as Well-structured/ill-structured, complex/simple, assumptions agreed upon/not agreed upon, familiar/new patterns

Setting

The context in which a specific class of people operates on a daily basis affects the way they seek and use information. Taylor (1991) believes that we tend to think of the bureaucratic organization as the only setting, but it is simply one setting among many others (e.g.,

physicians, independent lawyers, small business people, and the elderly).

The structure and style of different organizations will have different

effects on the information-seeking behavior of those within these

organizations. In addition, the main domain of interest of the

organization will have inherent patterns of dissemination, expectations of

reliability, and even expectations of information availability.

The setting also has some effect on the perceived ease of access to

information. Taylor (1991) asserts that accessibility encompasses more

than simple physical access in this case, having "something to do with

the perceived validity and utility of information and, perhaps above all,

with a sense that personal dialogue will help to clarify both need and

response, and hence to provide more useful information (Feldman &

March, 1981; Taylor, 1986)" (p. 228). He further asserts that libraries or

information centers, considered to be formal gatherers of information,

"tend to be too far—both physically and psychologically—from the users

of information. The information packages stored and transmitted by the

more formal channels seldom match the way people want or use

information (Dervin, 1975)" (Taylor, 1991, p. 228). If this is the case,

people working in libraries and information centers must look to a new

model of information provision.

Resolution of Problems

Taylor's considerations in this area involve how a given set of

people views their problems and their anticipated resolution of these

problems. He believes that these perceptions and anticipations are a built-in but unconscious means of controlling the amount of information used. Problems are usually not solved by a single question and answer but rather "pose different requirements on the type of information perceived as necessary, and hence different uses to which information is put in the process of resolution" (p. 229). Taylor set up eight classes of information use generated by the perceived needs of users in particular situations that are not mutually exclusive.

1. Enlightenment: desire for context information or ideas to make sense of a situation

2. Problem Understanding: more specific than enlightenment, better comprehension of a problem

3. Instrumental: finding out what to do and how to do something.

4. Factual: need for precise data

5. Confirmational: need to verify a piece of information

6. Projective: future oriented, concerned with estimates and probabilities

7. Motivational: connected with personal involvement, of going on or not going on

8. Personal or Political: involved with relationships, status, reputation, personal fulfillment (p. 230)

In the area of problem resolution, Taylor also looks at information traits, which he describes as identifiable traits inherent in information

that are beyond the subject matter and can be related to problem dimensions and people's needs. Eight information traits isolated and described by MacMullin and Taylor (1984) are:

Quantitative continuum: from phenomena that can be measured and represented numerically to descriptive.

Data continuum: from empirical and replicable data to inferred data.

Temporal continuum: from historical or precedent setting information to forecasting and future modeling.

Solution continuum: from a single solution to a range of options that meet resolution criteria.

Focus continuum: from factual information regarding well-understood problems to diffuse information of idea generation and brainstorming (pp. 98-102).

Finally, Taylor analyzes three different information use environments that are highly dependent on information, but have differing definitions of valid information, in the context of the structure I have just outlined. He analyzes the information use environments of engineers, legislators, and practicing physicians, believing that these illustrate different types of information needs and uses, various kinds of problems, and significant differences in what each regards as information and accepts as a problem resolution.

Taylor further asserts that there is a great need for more studies that examine how different populations working in different contexts describe how specific information is used and how its use or nonuse affects their concerns. This statement pinpoints the value of a study that looks at the information use environment of online entrepreneurs working in the context of the online auction, an area missing from Taylor's work.

Information Use Environments and Rosenbaum

Other recent studies have used Taylor's concept of the information use environment as a framework to examine information needs and information seeking in particular contexts. Katzer and Fletcher (1992) and Rosenbaum (1996) studied the information environment of managers, while Barnes (1996) and Algon (1999) examined information use within the context of self-managed teams and project teams, respectively. Taylor's seminal work has also served as the basis for studies of Chief Executive Officers (CEO's) (Auster & Choo, 1994) and African-American gatekeepers in the inner city Milwaukee neighborhood of Harambee (Agada, 1999). Finally, Francis (1998) conducted research on the information use environment of agriculturists in Trinidad and Tobago, the only study found that utilized Taylor's (1991) conceptualization of the entrepreneur/farmer as a "set" of people.

Rosenbaum's (1996) studies of the information use environment of managers were of particular value to my dissertation research, not only because they address information use within the context of a digital information environment, but because his work draws on Gidden's (1984) theory of structuration. Structuration theory has a focus on the rules and resources that compose social structures, they ways in which these structures constrain human action, and the continual production and alteration of these structures through social action.

Rosenbaum (1997) believes that the digital information in an organization is both an administrative resource and a medium, and that through this information "power is exercised, as a routine element of the instantiation of action and interaction in an organizational setting" (Giddens, 1984, p. 16). Consequently, digital information "...both enables and constrains the information behavior of the people who use it; those who control it can exercise power over other people and resources" (Rosenbaum, 1997, Conclusion: What is the role of this resource in an organization? paragraph 1). Within this understanding, the problems experienced by various sets of people, the sources and the resources they use, and the formats of information are important. Furthermore, attention needs to be given to other components of the information use environment, such as acceptable problem resolutions and rules (H. Rosenbaum, personal communication, August 16, 2001). Of special

interest here are the rules that enable and constrain people in their access and use of information.

Information Seeking—User Centered Studies

A number of researchers have studied the experience of information seeking from the point of view of the library user. Cognitive processes that are involved in information need were the focus of Taylor's (1968) classic work on question negotiation in which he asserts that the user brings four levels of needs to the information-seeking task: visceral, the actual but unexpressed need for information; conscious, the within-brain description of the need; formalized, the formal statement of the need; and compromised, the question as presented to the information system.

Cognitive processes were also the emphasis of Belkin and his colleagues' (1978, 1980, 1982a, 1982b, 1983, 1984) work with the Anomalous States of Knowledge (ASK) model. This work centers on people with a problem who need assistance from some type of information system. Belkin, et al. assert that, because knowledge of the information needed to solve a problem maybe be limited or incomplete, people may have difficulty speaking about or even recognizing what is wrong; consequently, they cannot specify what is needed to resolve the anomalies (Dervin & Nilan, 1986). The primary goal of this work "has been to generate means by which information systems can yield documents from searches that are based on images, which are

constructed of dialog, of the user's area of interest" (Dervin & Nilan, 1986, p. 23).

Dervin's (1977, 1980, 1995) work with sense-making also took a cognitive approach, emphasizing how people use information and other resources in the process of making sense of their worlds, while Dervin and Dewdney (1986) extended Taylor's (1968) work on question negotiation. The sense-making approach was especially significant because it initiated a series of studies describing the information needs and uses of people in various contexts (Dervin & Nilan, 1986).

Dewdney and Ross (1994) studied reference service from the viewpoint of the user, while Saracevic, Kantor, Chamis, and Trivison's (1988) investigation of information seeking looked at the user's problems, proposed use of the information, knowledge state of the user, and the expectation of outcomes when asking questions. Their study called for a multidisciplinary approach to research on information seeking.

Kuhlthau's (1988a; 1988b; 1991; 1993; 1997) research into information seeking from the user's perspective is well known and widely cited. Her studies of the Information Search Process (ISP) have been grounded in a variety of contexts. The model based on her research goes beyond the cognitive aspects of information seeking to emphasize the affective processes of the search.

The results of an initial study Kuhlthau (1993) conducted indicated that users commonly experienced affective symptoms

associated with construct building as a natural part of the information search process. Her model of the ISP includes feelings associated with each stage of the information search process from apprehension and uncertainty when an information need is first realized to confusion and anxiety when attempting to comprehend the task ahead. A brief period of elation may ensue after thinking about the task and making the decision to begin the search. As the actual search begins, an attempt to bring a bit more focus to the problem usually results in confusion, doubt, uncertainty, and sometimes a feeling of extreme frustration when the information encountered is not what is expected. When the information encountered finally allows focus on the problem, a feeling of optimism ensues, followed by confidence in the ability to complete the task. Information gathering then begins, which enhances interest and confidence that the task can be completed, in addition to the realization of the extensive work that will need to be done. At this time, a clearer sense of direction allows the information seeker to articulate needs to an information system or to an information professional. Finally, when the search is complete, a feeling of relief is experienced, along with satisfaction if everything went well or disappointment if the search was not fruitful.

Information Seeking in Electronic Contexts

According to Marchionini (1995) "electronic systems have begun to change users' expectations about what is possible in an information

society" (p. 99). He believes that the more electronic information systems become available, the more we will change the way we think about and react to information. Perhaps for this reason, a trend is surfacing wherein previous studies that were conducted in the traditional information environment are now being conducted in the electronic environment. For example, a study involving the library use and information-seeking behavior of veterinary medical students has been revisited to determine how these students seek information in an electronic environment (Pelzer, Wiese, & Leysen, 1998). In an article about learning in digital libraries, Kuhlthau (1997b) recreated her study of the information search process (ISP) in an electronic environment, presenting a theory for creating learning environments in digital libraries based on the concepts of the constructivist learning approach. Over time, many studies involving electronic searching and information seeking highlighted professional online searchers or intermediaries. The work of Saracevic and his colleagues, who conducted the largest study of online searching by expert intermediaries (Fidel, 1984, 1991; Saracevic & Kantor, 1988a, 1988b; Saracevic, Kantor, Chamis, & Trivison, 1988), is a well-known example.

Bates' (1989; 1990) research concerns the consideration of user traits in the design of human-computer interfaces. She details a new model of searching in online and other information systems that she terms berrypicking, asserting that it will better guide effective interface

design because it is closer to the real behavior of information searchers than the traditional information retrieval model. Bates also asserts that the designers of advanced information retrieval systems are missing an opportunity to create sophisticated systems that provide an "optimal combination of searcher control and information retrieval power" (Bates, 1990, p. 575).

Blackshaw and Fischhoff (1988) borrow from the research of the design sciences and offer suggestions to characterize user decision-making processes employed in online database searching. These researchers detailed the decision-making process used to search for books on a variety of topics by constructing mental maps, which they then used to recommend new designs.

A user-centered focus-labeling approach to connecting online search strategies and information needs has been developed by Kennedy, Cole, and Carter (1997). Using a diagnostic tool suggested by Kuhlthau and Taylor's concept of "focus," these researchers assess and label an undergraduate's information need and then assign the most appropriate search strategy for the satisfaction of the need. Siatri (1999), on the other hand, examined online and electronic-based information seeking by comparing computer scientists in British and Greek universities. The objective of the study was to identify both retrieval methods and the types of electronic resources currently used by academics.

Information Seeking in Specific Contexts

In his theory of information transfer, Greer (1987) asserts that as members of various groups within society, individuals have uniquely identifiable patterns of creating, producing, disseminating, organizing, diffusing, and utilizing information. In addition, the roles people have in their everyday lives generate information needs that are characteristic of those particular roles. Hale (1986) suggests that the environment; the roles one has; and one's individual, personal characteristics all influence information use. For this reason, she argues that knowing as much as possible about these roles can give the information professional insights into information needs not available by studying the environment alone. Both studies point to the importance of the social context within which individuals seek information and the need to examine and understand the context in order to understand information seeking behavior.

The Leckie and Pettigrew Model

Leckie and Pettigrew (1997) have considered contexts of work in their research on information seeking and use. These scholars assert that understanding the work context involves the analysis of the various aspects of that work so as to reveal a worker's need for specific kinds of information, the process of retrieving it, and the use made of it. They further argue that the complex responsibilities of the position and the different roles played by that individual throughout a workday generate information needs. Factors such as corporate culture, if applicable,

individual habits, and availability of information systems and sources converge to affect the outcome as information needs arise. The way in which these variables come together differs from one person to the next.

A model produced by Leckie and Pettigrew (1997) assumes that "the roles and related tasks undertaken by professionals in the course of daily practice prompt particular information needs, which in turn give rise to an information seeking process" (p. 102). Their model details the fact that the many roles involved in the work lives of professionals are complex. The roles most frequently mentioned are service provider, administrator or manager, researcher, educator, and student. Furthermore, each role involves a variety of tasks, as indicated in the second layer of the model. In the view of these theorists, information seeking is highly related to the enactment of a particular role and the tasks associated with that role. With each information need, however, the characteristics are very different and are shaped by intervening variables, which will ultimately affect the outcome of the information-seeking activity. These researchers draw from the literature, stating that individual demographics, context, frequency, and predictability influence the character of professionals' information needs. Individual demographics are defined as age, profession, specialization, career stage, and geographic location; context is defined as situation specific need, internally or externally prompted; frequency is defined as recurring need

or new need; and predictability is defined as an anticipated need or an unexpected need.

The model next depicts the influence of sources and awareness on the information search process. Leckie and Pettigrew (1997) believe that "the sources available, and the individual's preference for certain channels, will affect information seeking" (p. 102). They further believe that professionals seek their information from a wide variety of sources that include colleagues, librarians, handbooks, articles, and even their own personal knowledge and experience. Preferred channels identified by information seekers may consist of formal channels (e.g., conferences or journal articles), informal channels (e.g., conversations with colleagues), internal or external sources (e.g., those within or outside the organization), and oral or written channels (e.g., paper copies or electronic texts). Awareness, meaning direct or indirect knowledge of various information sources and perceptions regarding the overall information-seeking process or the information retrieved, is also considered to exert influence on individual information-seeking behavior. In other words, awareness of information sources or content can determine the path followed in an individual's information-seeking process. In a review of the literature, Leckie and Pettigrew (1997) found that some of the critical variables affecting an individual's level of awareness are "accessibility (relative ease of access), familiarity and prior success (results obtained from strategy or source), timeliness (found

when needed), and cost (relative cost-effectiveness)" (p. 103). The optimal outcome of this information seeking is that "the information need is met and the professional accomplishes the task at hand, such as diagnosing an ailment, or completing a technical report" (p. 103).

Person-in-Situation Approach

Allen (1997) approaches information needs from a person-in-situation perspective. He believes information needs occur in many different situations. He asserts that since people are, simultaneously, individuals and members of groups, there are both individual and situational influences that determine their information-seeking behavior. Allen provides a model of information needs and influencing factors, believing that the four approaches can be integrated into a single "person-in-situation" model. This model is an elaboration of the basic problem-solving model, which consists of perceiving a problem, examining the alternative solutions, and evaluating and selecting a solution. According to Allen, each step in problem solving creates or promotes information needs.

Allen (1997) also considers the cognitive aspect of information seeking, which is conceptualized as the influence an individual's knowledge structure has on his or her behavior. The basic premise of the cognitive perspective is that "two people will experience different information needs in identical situations because they have different understandings of these situations. Their understandings will be

different because their knowledge structures derive from different past experiences" (p. 113). The need for information might occur whenever an individual does not have the necessary knowledge for perception, alternative identification, or alternative selection. Because people may lack the necessary knowledge to perceive their situation and the various alternatives, this so-called reality check, which causes them to notice that the reality they are perceiving fails to correspond to what they have experienced, could make them aware of an anomaly in their knowledge. In many cases, attempted resolution of this anomaly leads to information seeking, but, because failure of perception may be so complete, the person may have a difficult time articulating the information need. These perceptual failures are very noticeable when individuals are placed in a new situation or in a situation they do not understand. In this type of situation the central question becomes: "What do I do now?"

Allen (1997) offers what he calls the Person-in-Situation Model of Information Needs in which he shows both personal and situational variables producing constraints on behavior and courses of action at two levels: the situation that gives rise to the problem and the information-seeking process. In order for an individual to adequately perceive a problem, Allen asserts, certain knowledge resources are necessary that are part of this person's cognitive structure yet derived from an understanding of the situation that is socially constructed. In addition, when a group sets out to determine one single course of action to take in

a particular situation, the resources may be found in the consensus-building process; the group may also experience constraints stemming from the organization within which it is operating at the time. He believes that his model adequately portrays the pairing of person-in-situation constraints with person-in-situation resources. Additionally, individual and group information needs should not be treated separately because there are always links between individual and group behaviors that cannot be dissolved.

Contextual Information Use Studies

A variety of studies examine information needs and information seeking in particular and specific contexts. In the field of medical informatics, research studies have examined the information needs and information seeking behavior of physicians (Abad-Garcia & Gonzalez-Teruel, & Sanjuan-Nebot, 1998; Elayyan, 1988; Gorman, 1999; Gruppen, Wolf, Van Voorhees, & Stross, 1987; Lomax, Lowe, Logan & Detlefsen, 1998; Williamson, German, Weiss, Skinner, & Bowes, 1989;), nurses (Pettigrew, 1999), clinicians (Haynes, McKibbon, Walker, Ryan, Fitzgerald, & Ramsden, 1990; Wildemuth, Cogdill, & Friedman, 1999), and various other health professionals (Urquhart, 1999). Dervin (1984) studied the information needs of Californians and Dervin, Zweizig, Banister, Gabriel, Hall, and Kwan (1976) studied the information needs of urban residents. Recent studies of information needs and information seeking in everyday life contexts examined public library users (Coles,

1999), the Internet for non-work use (Savolainen, 1999), everyday life (Savolainen, 1995), low-income African American households (Spink, Bray, Jaeckel, & Sidberry, 1999), Scottish households (Davenport, Higgins, & Somerville, 1997), adolescents and career information (Julien, 1997), the poor (Chatman & Pendleton, 1995), and girls and drug information (Todd, 1997).

The work environment is also the subject of recent studies examining school governors (Dixon & Banwell, 1999), a securities analyst (Kuhlthau, 1997a), journalists (Fabritius, 1998), senior executives (Keane, 1998), project teams (Algon, 1997), low-skilled workers (Chatman, 1987), a military university campus (Reneker, Jacobson, Wargo, & Spink, 1999), managers (Kirk, 1997), auditors and engineers (Wai-yi Cheuk, 1998), and the newsroom (Fabritius, 1998). Of particular interest is Kuhlthau's (1997a) case study of a security analyst in which she determined that job-related experience is important in determining information-seeking behavior. According to Kuhlthau, as a person becomes more familiar with and proficient in a particular job, the information seeking and use process changes.

Information Seeking in Business Contexts

Even though monitoring their environments is a critical factor to small business success, a common belief is that small businesses traditionally have fewer resources to use in this activity than large businesses. Triana, Welsch, and Young (1984) blame this dearth of

resources on lack of contacts and knowledge about where to obtain information, a problem they believe plagues almost all new business owners. These statements were based on the traditional bricks-and-mortar type of business. Entrepreneurs operating in the online environment are actually working in the information-rich environment that others turn to today in order to satisfy their information needs. In fact, traditional small businesses have the opportunity to level the playing field by taking advantage of information services available in today's online environment. Does this new breed of entrepreneurs take advantage of information-rich surroundings to solve their own problems, or do they carry the same baggage as the traditional entrepreneurs? Do they prefer the same sources to meet their information needs as their bricks-and-mortar counterparts?

Preferred Sources of Traditional Entrepreneurs

Countless studies have been conducted to determine where these traditional small business managers/entrepreneurs prefer to find the business information they spend in excess of two hours per day seeking (Cotton, 1995). In summary, most of these studies have found that these individuals prefer to use personal or face-to-face sources of information such as family and friends (Specht, 1987; Smeltzer, Fann, & Nikolaisen, 1988; Schafer, 1990; Brush, 1992b;), networking and significant other (Nelson, 1987), or distributors, consultants, customers, employees and established entrepreneurs (Neelameghan, 1977). Researchers Kaish and

Gilad (1991) found the opposite, in that entrepreneurs preferred nontraditional sources of information such as patent filings and strangers. Executives, however, gravitated toward personal, face-to-face sources such as subordinates, professional acquaintances, customers, and consultants, preferring to go "directly to those likely to have direct input to a business problem or idea" (p. 56). In addition, Kaish and Gilad found, just as Kuhlthau (1997a), that after gaining experience, entrepreneurs seem to place more trust in themselves and rely less on input from others.

Problems of Traditional Entrepreneurs

Various studies group the problems of small business managers/entrepreneurs into four categories: general management, operations, finance, and marketing, thus predicting the kinds of information that they would seek (Triana, Welsch, Young, 1984; Young & Welsch, 1983). Other studies define even more areas where information might be sought. One identifies nine areas into which most business-related information needs are sure to fall: employee training, employee compensation, performance evaluation, employee selection, product/service line, product quality, pricing, business financing, and computer systems (Pineda, Lerner, Miller & Phillips, 1998).

Information Processing/Learning Theories

The process of information seeking from the user's point of view cannot be thoroughly examined without considering that information

users think and seek information in different ways. Even though their needs may be similar, all entrepreneurs will not approach an information problem in the same way. In order to meet the needs of individuals with varying learning styles, different ways of seeking information along with preferences for different formats of information should be considered in the development of information products if optimum service is the goal.

Pask (as described in Eisenberg & Berkowitz, 1990) categorizes information seekers and users as holists and serialists. In a systematic fashion, holists survey all of the possible information sources and then choose those that are a high priority, working in a top-down hierarchical manner. The sources deemed as high priority are then individually examined. Serialists may find out about a source, then locate it, use it, and go on to another source, operating in a linear and sequential fashion. Serialists quit when they think they have enough information, which is described as satisficing in the theory of bounded rationality.

Bates (1989) described information seeking as berrypicking, making the analogy that information sources are scattered everywhere just as berries on the bush. Because they do not come in bunches, they must be picked one at a time. She believes that the user may begin with just one feature of a broader topic or one relevant reference and move through various sources. With each source, the user may get a new idea or new direction to follow, thus a new query concept. While this sounds similar to Pask's description of a serialist, Bates makes the case that the

query itself constantly evolves throughout the entire process. This query evolution results in the use of bits and pieces from each stage of the search to reach a satisfactory solution.

Both the preferred learning styles and the preferred format of the information seeker definitely impact the information-seeking process. Kolb, Rubin, and Osland (1991) examine the learning process in order to understand how people "generate from their experience the concepts, rules and principles that guide their behavior in new situations, and how they modify these concepts to improve their effectiveness" (p. 59). These researchers provide a four-stage learning cycle but mention that people are strong in some of these categories and weak in others. They maintain that the process begins with a concrete experience, which is followed by observation and reflection, which in turn leads to the formulation of abstract concepts and generalizations, and finally moves toward a hypothesis to be tested in future actions. "Although everyone has the capacity for functioning in all four ways, individuals have preferences for one mode over the others and find operating in that mode entirely natural" (Thomas, 1999, p. 76). For example, people who are stronger in the active experimentation cycle might prefer hands-on forms of information to meet their needs rather than something in writing (Kolb, 1984).

CHAPTER 4

METHODOLOGY

Most of the existing studies of information use by entrepreneurs or small business managers are found in the business literature. These studies have employed statistical models and surveys or forced-choice questionnaires, which, in many cases, seem to put "words in the participants' mouths" by supplying informants with lists of possible information sources from which to choose (Pineda, et al., 1998; Triana, et al., 1984, Kaish, et al., 1991; Cooper, et al., 1995). This dissertation employs a research approach based on the assumptions of the interpretive paradigm (Littlejohn, 1996) and a grounded theory methodology consistent with research aims and questions.

Investigation of my research questions involved examining the business world of these online entrepreneurs from their own perspectives. Thus, the interpretivist paradigm, supporting the belief that the social world can only be understood from the point of view of the individuals directly involved in the activities to be studied, was appropriate (Burrell & Morgan, 1979). The natural setting is an essential ingredient in research design when the aim of the research is to understand the meaning that the phenomena of interest has for study participants (Denizen & Lincoln, 1998).

A Grounded Theory Approach

To examine the information use environment of eBay entrepreneurs, I chose a grounded theory approach. According to Chenitz and Swanson (1986), "the objective of grounded theory is the development of theory that explains basic patterns common in social life" (p. 3) that are observed to arise in the activity being studied. Glaser and Strauss (1967) assert that the generation of grounded theory is a vehicle that can be used to arrive at a theory suited to its supposed uses. For Artinian (1986), grounded theory seeks to identify a process that describes the characteristics of a particular social world or context. In my study, a grounded theory approach offers the means for looking at the role of information in entrepreneurial activity and decision making from the perspective of those involved in these activities. This framework appeared to be a good fit with this study of the information use environment of entrepreneurs in the context of the online auction.

Research Questions

In order to describe the information use environment of online entrepreneurs, it was useful to understand the kinds of activities that engage this population and the impact information has on these activities. Thus, the following research questions guided this study:

1. What is the experience of online entrepreneurship as it is understood by those who engage in online business activity at eBay?

2. What do participants say about the role(s) of information in entrepreneurial activity and decision-making?

3. What information sources and resources have online entrepreneurs found the most useful, and how has that information been used—in other words, where do they go for their information?

4. What formats of information have online entrepreneurs found the most helpful and why?

5. What kinds of problems, if any, have online entrepreneurs encountered in retrieving the information they have found helpful or useful?

6. What rules have enabled and/or constrained access to information that online entrepreneurs deem to be helpful or useful?

Definitions and Limitations

Definitions

Auction. A sale of property to the highest bidder (Merriam-Webster, Online).

Bid blocking. Blocking certain people from bidding on your auction.

Bid cancellation. The cancellation of a bid by a seller or a buyer. Sellers may cancel the bid of any user with whom they would be uncomfortable completing a transaction (eBay glossary).

Bid retraction. A cancellation of the bid by the bidder (eBay glossary).

Blackboard. The award-winning e-Education enterprise software platform that encompasses course management, academic portal, online campus communities, and advanced architecture allowing easy integration with multiple administrative systems (Blackboard Homepage, 2001).

Bulletin board. In this study, bulletin board refers to a computerized or electronic bulletin board. This is an area online where a person can post a message in much the same way as a real world bulletin board, and another person can read and respond to that message by posting another message on the electronic bulletin board.

Chat. Real time communication between two users via computer. Once a chat has been initiated, either user can enter text by typing on the keyboard, and the entered text will appear on the other user's monitor. Most networks and online services offer a chat feature.

Contact information. eBay users provide contact information when they register — including name, address, and phone number. All registered users must have valid and current contact information on file.

Dutch auction. An auction in which one or more identical items are offered for sale at the same time. With multiple items up for sale, multiple bidders can win. Also, one bidder can try to buy more than one

quantity. All winning bidders pay the lowest successful bid amount (AuctionWatch, Help section, FAQ Auction formats section, ¶5).

eBay. Founded in September, 1995, eBay is the leading online marketplace for the sale of goods and services by a diverse community of individuals and businesses (eBay Company Overview).

eBay payments. eBay Online Payments enables eBay sellers to accept credit cards or Electronic Checks from winning bidders. Any winning bidder can pay safely online using a Visa, Mastercard, or Discover credit card and Electronic Check for an auction that includes eBay Online Payments as a payment method.

Entrepreneur. Many definitions of the word entrepreneur have been offered over the years, and different research studies have utilized different definitions. In fact, Gartner (1988) suggests that two problems with research in entrepreneurship have been the lack of consensus on a definition of the word, on the one hand, and a failure to provide any definition on the other.

For the purposes of this study, I used the following definition offered by the economist, Joseph Schumpeter (1959, p. 72):

"The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, opening a new source of supply of materials or a new outlet for products, by reorganizing a new industry...."

This definition, which casts the "entrepreneur as innovator" has "furnished the pole star by which a whole school of entrepreneurial historians [have] steered their craft" (Livesay, 1982).

Feedback rating. Every eBay user has a feedback rating, which is made up of comments from other eBay users who have been involved in a transaction with that person. Positive feedback adds an increment to the rating, negative feedback subtracts an increment from the rating, and neutral feedback does not change the feedback rating. This rating is the eBay user's official reputation in this online community.

Gallery. The Gallery presents miniature pictures, called thumbnails, for all of the items for which sellers have supplied pictures in JPG format (eBay glossary).

Information use environment. The set of those elements that (a) affect the flow and use of information messages into, within, and out of any definable entity; and (b) determine the criteria by which the value of information messages will be judged (Taylor, 1991, p. 218).

Keyword spamming. Key word spamming is the practice of including brand names or other "key words" for the purpose of gaining attention or diverting users to a listing. Key word spamming is unfair to members who may be searching for a specific item and receive search engine results of listings that are not selling the item. It is also a manipulation of the search engine. Users often are confused and frustrated by such

tactics. Certain uses of brand names may also constitute trademark infringement and could expose sellers to legal liability (eBay Glossary).

Minimum bid. The smallest amount that can be entered as a bid for a specific auction. This amount is established by the seller and is shown on that specific auction page.

Online auction. A sale of property to the highest bidder in which all bidding takes place entirely online.

Pinks. Employees of eBay who monitor the discussion boards of eBay.

PowerSellers. Recognized eBay sellers who achieve certain sales performance, maintain 98% positive feedback, and embrace the integrity of core eBay community values (eBay seller guide).

Private auction. A seller may specify that an auction will be private. This means that the bidders' email addresses will not be disclosed on the item screen or the bidding history screen. Only the seller and the high-bidder are notified via email when the auction is over (eBay glossary). This option is useful when the seller believes that potential bidders may not want their identities disclosed to the general public.

Proxy bidding. Placing a maximum bid that is held in confidence by the system. The eBay system will use only as much of the maximum bid as is necessary to maintain the bidder's high bid position (eBay glossary).

Relisting. When an item has not sold and the seller wishes to list it again, this feature allows the user to relist the item without re-entering the original information.

Reserve auction. The reserve price is the lowest price a seller is willing to accept. This amount is generally higher than the minimum bid. In order to win the auction, a bidder must meet or exceed the reserve price and have the highest bid.

Shilling or shill bidding. The practice of sellers bidding up their own items or asking a friend or other associate to do so (eBay glossary). *Spam.* Electronic junk mail or junk newsgroup postings. Some people define spam even more generally as any unsolicited e-mail. However, if a long-lost brother finds your e-mail address and sends you a message, this could hardly be called spam, even though it is unsolicited. Real spam is generally e-mail advertising for some product sent to a mailing list or newsgroup (Webopedia).

Sniping. Sniping means placing a bid in the closing minutes or seconds of an auction (eBay glossary).

UserID. UserID is the name under which a person trades on eBay. It can also be a name under which a person enters any password-protected computer program or website.

Virtual classroom. This is an area within BlackBoard web-based course software where all people with access can congregate and have real-time conversation. It operates much like a traditional classroom in

that the instructor is in charge and can give students the floor to speak or allow everybody to speak at once.

Limitations

While this study examines the information use environment of online auction entrepreneurs, the context is limited to the online auction, eBay. In addition, because there are 27.9 million registered eBay users, and because goods are offered for sale in 21 major categories subdivided into 236 subcategories, it was necessary to limit the participants in this study to a sampling of eBay sellers dealing in the "Pottery & Glass" category, and specifically, in the "Fenton," "Fire King," and "Depression Glass" subcategories.

Research: Issues, Design, and Analysis

Access, Distance, and Membership

My choice of topic for this research study arose from my personal interest in entrepreneurship, particularly the experience of doing business online. This reflects Lofland and Lofland's (1995) suggestion that research should start from "where you are." In this way, one's own biography enables physical and/or psychological access to the social setting. This study does not attempt to manipulate the phenomena so that *a priori* theories and relationships can be tested (McCracken, 1988), but rather seeks to provide a truthful account of the social world being studied by sharing firsthand the environment, problems, background, language, rituals, and social relations of the specific group involved (Van

Maanen, 1988). The actions and words of the members of the group studied as they express their shared cultural knowledge are much easier to interpret if the researcher is a participant in these activities. Van Maanen (1988) further contends that conducting fieldwork means living with and living like those who are studied. For a period of five years, 1996-2000, I was totally engaged in this social setting as an online entrepreneur utilizing the eBay online auction as a sort of virtual "storefront" (Yamada, 1995, p. ss27). Although this level of engagement facilitates access to a research site, it may create a problem for the researcher in maintaining the necessary critical distance that scholars working in their own cultures so often lack. For example, everything is potentially "mysterious" to those working in a new culture, while the assumptions one brings when working in one's own culture can, unless noted, obscure or hide from view phenomena of interest and concern. The task for the investigator, in such circumstances, is to manufacture this critical distance. McCracken (1988) discusses several ways to bring this about, one of which is to leave for another culture and then return. Although I was once involved in an Internet-based business as an eBay seller and engaged in online auctions as a regular participant, I no longer sell online, nor do I plan to do so in the future. The fact that I was an online auction seller but no longer sell online placed me, as the researcher, in the category of a "marginal native" (Freilich, as cited in Van Maanen, 1988, p. 2), which gave me access to the eBay social

setting, yet allowed me to maintain critical distance. In addition, the overwhelming majority of the respondents in my research were people I had never met, creating further distance.

Corbin (1986) contends that the greater variety of data collected, the more grounded the data set will be. Because any data are subject to multiple interpretations, multiple methods of data collection--in this case within methods triangulation--are useful. In triangulation, the strength of one method can offset the weaknesses of another, while together their use provides a method of " confirming data from different sources, confirming observations from different observers, and confirming information with different data collection methods" (Krathwohl, 1998, p. 276). In this study, conducted during the four-month period of May through June, 2001, I used three methods of data collection: focus groups, interviews, and document analysis.

Focus Groups

Lofland and Lofland (1995) recommend considering focus group interviews as a supplement to intensive, one-on-one interviews, if the topic is reasonably public and not something that would cause embarrassment to participants. They believe that the focus group offers "the advantage of allowing people more time to reflect and recall experiences; also, something that one person mentions can spur memories and opinions in others (p. 21)." Additionally, because it is possible to allow moments of silence, and take time to listen to others,

participants can rethink and amend initial statements. Furthermore, Krathwohl (1998) mentions that focus groups are valuable to use as an "initial exploratory step in questionnaire development to learn what to ask and how best to ask it" (p. 295).

Interviews

The researcher conducting a grounded theory study, Creswell (1998) asserts, will make several visits to the field and conduct 20 to 30 interviews, continuing interview data collection until categories are saturated. Categories represent units of information composed of events, happenings, objects, and actions/interactions that are conceptually similar in nature (Strauss & Corbin, 1998). Lofland and Lofland (1995) also recommend intensive interviewing as a method to elicit "rich, detailed materials that can be used in qualitative analysis" (p. 18) from the informants.

Document Analysis

While collecting and analyzing observations and documents may take place in a grounded theory study, Creswell (1998) maintains that this activity is atypical. I decided to include document analysis because web pages, discussion boards, frequently asked questions (FAQs), and other information are as integral a part of operating on eBay as they are in other types of online environments.

Approach to Data Analysis

According to Creswell (1998), data collection and data analysis in a grounded theory study are a "zigzag" process, meaning that the researcher goes "out to the field to gather information, analyze the data, back to the field to gather more information, analyze the data, and so forth" (p. 57). Theoretical sampling is utilized, meaning that the participants chosen are regarded as the most beneficial in helping the researcher form the theory (Creswell, 1998).

Glaser and Strauss (1967) define theoretical sampling as "the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (p. 45). Initial decisions are not based on a preconceived theoretical framework, though the data collection process is controlled by the emerging theory. The researcher may make any number of visits to the field, depending on whether the informational categories become saturated. When categories become saturated, the researcher can find no new information (Creswell, 1998). This form of data analysis takes information from data collection and constantly compares it to the emerging categories. The data analysis process in grounded theory research is very systematic and follows a standard format (Creswell, 1998, p. 57):

1. Open coding, in which the researcher forms initial categories of information about the phenomenon being studied by segmenting information.

2. Axial coding, in which the investigator assembles the data in new ways after open coding.

3. Selective coding, in which the researcher identifies a "story line" and writes a story that integrates the categories in the axial coding model.

4. Finally, though not usually found in grounded theory studies, the researcher may develop and visually portray a conditional matrix that elucidates the social, historical, and economic conditions influencing the central phenomenon.

The result of this data collection and analysis process is a substantive-level theory written by the researchers close to a specific problem or population of people.

Conducting Qualitative Research Online: Procedural and Ethical Issues

There is a growing body of literature reflecting increased interest in conducting qualitative research online. Because the thrust of my research study involved the information use environment of people operating in an online environment, using online methods was a logical decision and offered certain possibilities. A concern with regard to obtaining information about off-line lives through online communication or computer-mediated communication (CMC) has arisen in the belief that there is a risk of being deliberately deceived. In addition, some

researchers contend that the online medium itself reduces access to the ethnographic context (Paccagnella, 1997). However, the online world, no less than the off-line world, is made up of various communities. If the researcher is familiar with the online community through personal experience, this experience can go a long way toward filling these contextual gaps. As for deception issues, the possibilities for encounters with dishonest or disingenuous informants exist as much in the off-line world as it does online. Krathwohl (1998) also notes that online focus groups appear to bring forth more honesty in responses than do those conducted face-to-face. As Jones (1995) argues,

> CMC, of course, is not just a tool; it is at once technology, medium, and engine of social relations. It not only structures social relations, it is the space within which the relations occur and the tool that individuals use to enter the space. It is more than the context within which social relations occur (although it is that, too) for it is commented on and imaginatively constructed by symbolic processes initiated and maintained by individuals and groups. (p. 16).

Some researchers believe that the use of the Internet for research requires new rules for the electronic medium. Whether this is necessary depends on whether we view cyberspace as so unique that current ethical standards cannot begin to address the new problems. After considering various points of view on conducting online research,

Thomas (1996) concluded that the three basic guidelines are still sufficient to guide researchers in doing things right. These guidelines are: never lie to participants; never put participants in a risk position; and minimize social harm while enhancing social good.

Mann and Stewart (2000) suggest that the atmosphere of suspicion that may exist "when faceless researchers contact participants" (p. 136), can be dispelled through a frank and open discussion of purposes and processes of the research. Participants should be as informed as the researcher can possibly make them. The researcher who will never meet the participants in person may employ self-disclosure as a trust-building strategy. The more personal information that is disclosed online, the more likely others are to follow suit. This mutual sharing enhances a sense of well being in a safe communication environment, thus building more trust.

The Study

Original Plan

As stated, the original design for my dissertation research called for the use of focus group interviews, in-depth interviews conducted with eBay sellers, and the examination of documents that eBay makes available to auction participants.

Selecting the Participants

The participants for the in-depth interviews and the online focus groups were to have been selected from the population of eBay sellers

using systematic purposive sampling. "Purposive sampling is most often used in qualitative research to select individuals or behaviors that will better inform the researcher regarding the current focus of the investigation" (Krathwohl, 1998, p. 172). In order to maintain investigator credibility and access to the experience of my informants during the research process, I chose to include eBay auction that reflect my own expertise: Fenton Glass, Depression Glass, and Fire King Glass: all listed in the category "Glass and Pottery." Because the sampling frame of eBay participants who sell in these categories would be impossible to determine, I decided to select a date (April 16, 2001), download all auctions ending on that date in the categories listed above, and examine the sellers' user IDs and feedback ratings. A list of user IDs created from each auction, with all duplicate user IDs removed, was to constitute the sampling frame for the study.

Conducting Interviews and Focus Groups Sessions

Creswell (1998) recommends 20 to 30 interviews as an appropriate number for in-depth interviews. For this reason, I planned to interview 30 eBay auction participants. To allow for the fact that not every person whose name was chosen would be willing to be interviewed, I drew a sample of 60 names from these categories as listed. A sample of 60 names seemed appropriate at the time as it allowed for the refusal of every other potential participant.

My plan was to generate a total of the number of unique user IDs from each of these categories and then add these numbers together for a grand total. The number of unique user IDs in each category would be divided by the grand total in order to create a percentage that represented the portion of the total unique user IDs that was found in each category. For example, if the total number of unique user IDs in all three categories totaled 100, and the Fenton Glass category had 20 unique user IDs, then 20% of the respondents, or six, should be drawn from the Fenton Glass Category. When the number of participants to be drawn from each category was determined, the names in that category were to be further subdivided into two lists. The first list would consist of user IDs with feedback ratings over 500, which would be called "experienced sellers," and the second list would consist of users with feedback ratings under 100, which would be called "new sellers." Half of the required respondents would be drawn from the "experienced sellers" list, and half would be drawn from the "new sellers" list. In the Fenton Glass example requiring a total of six participants, three user IDs would be drawn from the "experienced sellers" list, and three user IDs would be drawn from the "new sellers" list. This would further reduce the sampling frame, eliminating people with feedback ratings between 101 and 499.

As originally envisioned, the in-depth interview portion of data collection was to have been via electronic media, either in the discussion board area of Blackboard or the virtual classroom chat area. I thought

that using the discussion board area for the interviews would allow the informants more time to reflect on their responses and recall their experiences than is afforded within a traditional, face-to-face interview.

The initial plan to use several focus groups offered the possibility of utilizing traditional and online methods. Consequently, one of the focus groups would be conducted in the traditional face-to-face manner, while two focus groups would be conducted online. The face-to-face focus group were to have been tape recorded and transcribed, while the online focus groups were to be conducted via a listserv, thus creating their own transcripts.

Online focus group participants were to have been drawn from the same sampling frame as other eBay interviewees. Participants for the face-to-face focus group would be determined by a different method. Snowball sampling, sometimes called referential sampling, would be utilized to find local people who sell in the glass categories on eBay. Snowball sampling is used to find members of a particular group who are not visibly identifiable without assistance by "starting with someone in the know and asking for referrals to other knowledgeable individuals" (Krathwohl, 1998, p. 173). While one might consider that the owner of any booth that contains glass in an antique mall is a glass seller, it is impossible to know whether this person sells glass on eBay, unless assistance is sought out. For this reason, the staff at a local antique mall was asked to identify potential focus group participants from among

booth owners who not only sell glass but also sell that glass on eBay. It was expected that eBay sellers identified in this way would, in turn, identify others they knew who sell glass on eBay. This process would then continue until the "new" seller's advanced were among those that had already been named, thus showing that the identification had come full circle (Krathwohl, 1998).

Document Analysis

eBay uses a variety of online documents in a concerted effort to provide information to its users. These include: Community Help/Discussion Boards, Category-Specific Discussion Boards, User-to-User Discussion Boards, General Chat Rooms, Category-Specific Chat Rooms, Frequently Asked Questions (FAQs), the Library, Glossary, eBay Insider Newsletter, and the Community Chatter Newsletter.

The documents chosen for analysis in this study are ones that I thought would provide the most information relating to the research questions guiding the study. For example, since one of my questions deals with the problems online auction sellers experience and how they find the information to solve these problems, the Help/Discussion Boards provided great insight into the kinds of problems all users were attempting to solve. The Library area, of course, was chosen for document analysis because it should be a great source of information for the online auction sellers, much as a traditional library provides information to serve its specific clientele. Finally, I wanted to get an idea

about the kinds of information that eBay would distribute to its users as "news," so I chose to analyze one of the monthly newsletters provided to users. Because the *Community Chatter* newsletter seemed to be more of a chat room type of personalized newsletter, I chose to analyze issues of *eBay Insider*, previously called *eBay Life*, from January, 1999 through January, 2000. This title has since ceased publication and is archived on the website.

Ethical Concerns

An application for approval to use human subjects was submitted to the Institutional Review Board for Treatment of Human Subjects at Emporia State University (Appendix J). This application was accompanied by an informed consent form (Appendix K, Appendix L) that was developed using the review board guidelines. The informed consent document was distributed to study participants in electronic format, and each participant was requested to "indicate your agreement to participate in this study by replying to this message and keying in on this electronic document the statement: 'I agree to participate in this study' followed by your name and the date" and returning it via e-mail. My signature block with name, title, address, phone number, and e-mail address was attached to all correspondence with study participants. In planning the study, I also relied heavily on dissertation advisors and the Human Subjects Board to point out potential ethical problems.

Research in the "Real World" and Face-to-Face Focus Groups

The plans for the face-to-face focus group were set in motion. The co-managers at the local antique mall were asked to identify potential participants and, in turn, ask those identified to identify others. One of the managers even offered to hold the focus group at the mall after closing time and so the date was set. As I had known both co-managers for several years due to my involvement in the buying and selling of antiques and collectibles, I trusted their judgment and contacts to facilitate the creation of the focus group and focus group interview session.

One month later, I checked with one of the co-managers to make sure everything was moving smoothly with the plans; he assured me that it was. He did say that the mall owner was concerned about "what was in it for them," and I assured him that I would be willing to pay for the use of the space in addition to supplying them with enough candy treats (I have been a professional candy maker) to serve to their customers for several months. He assured me that he did not think there would be any problem but had just wanted to make me aware of what had been said.

It rapidly became apparent that using the proposed sampling plan was not feasible. A change in procedures at the e-Bay website made it impossible to obtain contact information on all of the user identification (User ID) names that were drawn. Citing privacy concerns, eBay

restricted members' access to the personal contact information of fellow online auction users.

In the past, eBay members have been able to request another member's contact information at any time using the site's "Contact (Personal) Information Request" feature. Now, however, retrieving such information will be permitted only when bidders and sellers are involved in a transaction (Roe, 2001).

I had no transactional involvement with any of these users; therefore, a stalemate was reached in the collection of eBay seller names.

After surveying the situation for a while, I realized that just as I do, some eBay sellers use their entire e-mail address as their User ID. Consequently, contact information could be collected on some sellers— those whose User IDs were their e-mail addresses. This approach, however, would involve a much larger time commitment because each time an auction was examined, it would not be to simply download the seller's User ID but also to look for those sellers with full e-mail User IDs with feedback ratings of 100 and under or 500 and over. This limitation disqualified most of the sellers from the listings observed. The reduction in the pool of possible study participants necessitated the inclusion of each of the sellers on the list. Selection of participants provided in this way involved examining the specified glass categories and securing new e-mail addresses. In the end, it was necessary to contact 639 people in order to secure 30 completed interviews.

Several weeks after my visit to the mall to check on the status of the focus group plan, I received a phone message from one of the co-managers informing me that plans for the focus group were falling apart. When I returned his call, I was able to talk with him and with the other co-manager. They told me that the mall was going to close down in about six weeks. Neither of them felt that they could go on with the focus group plans, even if it were held at another location, because they were too busy looking for other jobs. They apologized but explained that they simply did not have the time to work with me now. For these reasons, plans for using this group of people as a source for focus group data were abandoned.

As it turned out, the original data collection plan to use an e-mail invitation (Appendix A) to secure potential participants for the study also had to be amended. The first e-mail invitation was sent to a group of approximately 60 potential participants; it failed to elicit even one response. After analyzing what could be done to catch the interest of these people and convince them to participate in the research study, I realized that the subject line of the e-mail invitation was rather unappealing: "Participation in a Study." Therefore, I changed it to read: "Help a Fellow eBay Seller." This new wording was designed to let people know that I did indeed participate at eBay as a seller (Appendix B). Interestingly enough, this seemingly small change made a real difference

and opened enough electronic doors that I was able to secure twelve participants for two online focus group sessions.

As the study moved along and I attempted to secure 30 interview participants, I found that I had to examine the chosen categories and draw more names. One or two responses for every 50 e-mail invitations sent seemed to be the normal response. Efforts to secure informants and conduct interviews proceeded slowly, until my progress was stopped again, this time by the "cease and desist" e-mail I received from eBay's Safe Harbor feature. According to the message, I had been accused of "spamming" eBay users (Appendix C).

How did an e-mail invitation to participate in a research study constitute spam, I wondered? I had previously checked the rules on the eBay website regarding the use of others' contact information (Appendix D) and found that eBay grants its participants the right to use other users' information for "any other purpose that such user expressly agrees to after adequate disclosure of the purpose(s)" (eBay Privacy Policy, Appendix D). I believed that I had fulfilled the letter and the spirit of this regulation in the message I had sent to eBay sellers. After the initial anger about receiving this message subsided, I replied to the Safe Harbor message (Appendix E) and received a response (Appendix F) from eBay which detailed a few more rules that I could follow in order to "legally" contact other eBay sellers. After reading these rules, I realized that I needed to remove any reference to eBay from my invitation and any

reference to my own eBay User ID and feedback rating. At that point, I rewrote my invitation (Appendix G) and changed the subject line again to read: "Help a Fellow Online Auction Seller." To my surprise, emails sent with the new subject line garnered more responses than had the invitations with the subject line naming eBay.

The Data Collection

In the end, I conducted my two online focus group interviews using listservs set up for the purpose. The original plan had been to conduct these focus groups inside the password-protected discussion board area of Blackboard web-based course software. However, I could not get the participants to go to the website and participate. The answer seemed to be a listserv that, in effect, placed the questions "right under their noses," making them difficult to ignore. Subscription to the listserv was limited to the online focus group participants so that I could ensure the confidentiality of participant responses. Using a set interview protocol (Appendix H), I posed questions to informants one question at a time, in order to permit the participants to answer and react to each other's responses. There was very minimal reaction by participants to one another's comments; as a result, the focus group actually functioned as an online interview.

Because the Blackboard idea had not worked for the focus group, I believed it would not work for the online interviews either, so I abandoned that idea. I began by asking the questions from my prepared

list of interview questions (Appendix I) one at a time via e-mail. This process seemed to take an extremely long time and on many occasions involved reminding the participant to answer the questions. In quite a few other cases, this procedure resulted in the participant dropping out of the study with no other notice than simply not replying to any further questions. This loss resulted in discarding the partial interview and attempting to find another participant. Upon analyzing this difficulty, I decided that I would send the potential participants all questions upon securing the informed consent agreement. I hoped that this procedure would result in more completed interviews, which it did.

Document Analysis

A content analysis of documents on the eBay website proved to be the least problematic of the data collection methods employed in my study. One data set for the document analysis was past issues of a newsletter entitled *eBay Life*, the past issues of which are archived on the website for the dates January 1999-January 2000. The newsletter has not been published since January 2000. All issues of this newsletter were analyzed.

The informational postings that take place on the Community Help Boards made up a second data set. Due to the sheer volume (50,000+) of daily postings in these areas, it was not feasible to analyze every posting in every category for each day of the study period. Rather, I decided to analyze document postings for the number of days equivalent to the

number of days in the week multiplied by the number of months in the study. Thus, with seven days in each week, and four months in the study, a sampling of 28 days of postings to the Help Boards was analyzed. In other words, four Mondays were analyzed, four Tuesdays, four Wednesdays, and so on. This method still resulted in the examination of approximately 10,000 listings.

Consequently, combined with the multiple methods of data collection being employed in this study, examining this number of postings captures sufficient data to complete this research, given the nature of the research problem. In the interviews and the focus groups, informants were asked about the types of information that are important to them and the sources they find most useful or valuable, while the items posted on these help boards indicates the areas of concern for these online entrepreneurs in addition to the exact questions being asked.

Finally, the area labeled "Library" on the eBay website was analyzed to determine the kind of information that eBay is providing to its users for reference purposes. As a "glass" category was not among the options in the Library area, I chose to use the category of pottery as the basis for my analysis, as it most closely represents the categories from which the study participants were drawn. Study participants were also asked to comment on their usage of this variety of sources during focus group interviews and individual in-depth interviews.

Chapter Five presents a detailed description of the data collected through the interviews, focus groups, and document analysis. In order to utilize the data to analyze the context within which these online auction entrepreneurs made choices about useful information, it was presented through the framework of Taylor's (1991) Information Use Environment (IUE). The IUE model allows us to examine "the set of those elements that (a) affect the flow and use of information messages into, within, and out of any definable entity; and (b) determine the criteria by which the value of information messages will be judged" (p. 218).

CHAPTER 5

THE INFORMATION USE ENVIRONMENT OF

ONLINE AUCTION ENTREPRENEURS

Conceptual Framework

The primary purpose of this chapter is to report the data from this study within the framework of Taylor's Information Use Environment (IUE). Taylor (1991) believes that data about information use environments can be divided into four categories. The first of these categories is sets of people, and Taylor believes there to be a useful division here into four classes: the professions, entrepreneurs, special interest groups, and special socioeconomic groups. The second category is typical settings in which these sets of people operate. The third category consists of the typical problems experienced by sets of people; the fourth involves what constitutes problem resolution for these particular sets of people. Taylor's (1991) approach also calls for an examination of the context within which information users "make choices about what information is useful to them at particular times. These choices are based, not only on subject matter, but on other elements of the context within which a user lives and works" (p. 218).

Can we consider eBay sellers as entrepreneurs within Taylor's model? One of the problems with research in the field of entrepreneurship has been the lack of a definitive description of an entrepreneur. Consequently, people conducting research in this field

have not necessarily been studying the same thing. In this study, I made use of Schumpeter's (1952) definition, which characterizes entrepreneurs as innovators who open "a new source of supply of materials or a new outlet for products" (p.72). In short, entrepreneurs are those who start their own businesses. eBay sellers seem to fit well into Schumpeter's model: they have exploited several inventions/innovations, including the Internet itself as well as the "online auction;" they have opened new outlets for their products through the use of computer technology; and they have taken advantage of the access to a world of potential buyers in a way that has truly reorganized the context of buying and selling. Indeed, since it is now possible to bid on and buy just about any kind of merchandise 24 hours a day, seven days a week, the very notion of what it means to buy and sell has been reframed.

For the purposes of this study, forty-one online entrepreneurs were interviewed regarding their online activities and experience and their information-seeking behavior. Thirty participated in in-depth interviews; each of the other eleven took part in one of two focus group sessions. Both interviews and focus group sessions were conducted online. In some instances, not every interviewee responded to every question posed.

Taylor's model provided the basis for the interview questions asked of the participants in the study and for the examination of the eBay website, specifically those aspects with relevance to the entrepreneurial interests and activities of one specific group of subjects, sellers who

specialize in Fenton, Fire King, and Depression glass. I also used the model as a way of organizing and presenting the data collected through an analysis of interviewee responses and document analysis. Some of the interview questions were designed to collect demographic information on the eBay sellers themselves; others were directed at determining the extent of their involvement in online selling and the length of their participation in these activities.

Sets of People

Demographic Variables

Defining exactly what determines a set of people in terms of information behavior involves examining differences in terms of a variety of characteristics. In defining an Information Use Environment, Taylor (1991) believed that the demographic variables of age, sex, race, and marital status did not significantly affect the basic hypothesis that "certain predefined categories of people have different information behaviors one from another" (p. 223) but that there are interesting questions to examine regarding the effect of these variables on individual information behavior. Taylor (1991) argues that education is the most important variable in predicting information behavior; however, he also notes that the nature of the business or profession and the demand for certifying process as a prerequisite for engaging in an activity determined the relevance of this particular characteristic.

Table 1. Demographic Characteristics of Study Respondents by Number

and Percentage

N=41

Demographic	Category	Interviews n=30		Focus Groups n=11	
		Number	Percentage	Number	Percentage
Age	Under 18	0	0	0	0
	19-25	1	3.3	0	0
	26-39	5	16.6	2	18.1
	40-54	13	43.3	5	45.4
	55+	7	23.3	2	18.1
Gender	Female	20	66.6	7	63.6
	Male	5	16.6	2	18.1
Current Marital Status	Single, never married	1	3.3	0	0
	Single, separated, divorced, widowed	6	20	3	27.2
	Married	18	60	6	54.5
Race/Ethnicity	White, not Hispanic origin	25	83.3	9	81.8
	Black, not Hispanic origin	0	0	0	0

Demographic	Category	Interviews n=30		Focus Groups n=11	
		Number	Percentage	Number	Percentage
	Asian/Pacific Islander	0	0	0	0
	American Indian/ Alaskan Native	0	0	0	0
Highest Level of Education Attained	High School	6	20	3	27.2
	AA Degree	3	10.0	0	0
	BA/BS Degree	7	23.3	2	18.1
	MA/MS Degree	3	10.0	1	9.0
	Ph.D./Ed.D. Degree	0	0	0	0
	Other	6	20.0	3	27.2
Total Responses		25	83.3	9	81.8
Declined to Answer		5	16.6	2	18.1

Table 2. Demographic Characteristics of Study Respondents by Group

N=34

Demographic	Category	Interviews N=25		Focus Groups N=9	
		Number	Percentage	Number	Percentage
Age	Under 18	0	0	0	0
	19-25	1	4.0	0	0
	26-39	5	20.0	2	22.2
	40-54	12	48.0	5	55.5
	55+	7	28	2	22.2
Gender	Female	20	80.0	7	77.7
	Male	5	20.0	2	22.2
Current Marital Status	Single, never married	1	4.0	0	0
	Single, separated, divorced, widowed	6	24.0	3	33.3
	Married	18	72.0	6	66.6
Race/Ethnicity	White, not Hispanic origin	25	100.0	9	100.0
	Black, not Hispanic origin	0	0	0	0
	Asian/Pacific Islander	0	0	0	0

Demographic	Category	Interviews N=25		Focus Groups N=9	
		Number	Percentage	Number	Percentage
	American Indian/Alaskan Native	0	0	0	0
Highest Level of Education Attained	High School	6	24.0	3	33.3
	AA Degree	3	12.0	0	0
	BA/BS Degree	7	28.0	2	22.2
	MA/MS Degree	3	20.0	1	11.1
	Ph.D./Ed.D. Degree	0	0	0	0
	Other	6	24.0	3	33.3

Tables 1 and 2 present the demographic data collected from the study participants in the online focus groups and the online interviews. Because not all study participants responded to the demographic questions, the data is presented in two different tables. Table 1 presents the data as a percentage of overall study participants, while Table 2 presents the data as a percentage of those who actually answered these questions.

Eighty-nine and nine-tenths percent (34 people) of the overall population (n=41) for this study responded to the demographic questions. Of this number, 60.9 percent were interviewees and 21.9

percent were focus group participants. Overall, 17 percent of the overall total population (n=41) for this study, or 7 people, declined to respond to the demographic questions. However, 83.3 percent (n=30) of the interviewees and 81.8 percent (n=11) of the focus group participants responded to these questions.

Of the 34 respondents who answered the demographic questions, 79.4 percent were over age 40, with 52.9 percent (n=34) of these respondents in the 40-54 age group and 26.4 percent (n=34) of the respondents in the 55+ age group. The 40–54 age group consisted of 52 percent of the interviewees (n=25) and 55.5 percent (n=9) of the focus group participants, while the 55+ age group consisted of 28 percent (n=25) of the interviewees and 22.2 percent (n=9) of the focus group participants. The 26–39 age group was made up of 20 percent (n=25) of the interviewees and 22.2 percent (n=9) of the focus group participants. The largest variation was found in the 55+ age group, with a difference of 5.2 percent between the percentage of interviewees (23.3%) and the percentage of focus group participants (18.1%) in this category. No responding participants from either group were under age 18, and only one person overall was in the 19-25 age range.

Females made up 80 percent of the interviewees (n=25) and 77.7 percent of the focus group participants (n=9) who responded to the demographics questions, showing very little variation here.

Very few single people answered the demographic questions;

only 4 percent (n=25) of the interviewees were single and none of the focus group participants were single. Married people made up the largest group of participants who answered these questions, with 72 percent of the interviewees (n=25) in the married category and 66.6 percent (n=9) of the focus group participants. People who were either separated, divorced, or widowed made up 24 percent (n=25) of the interviewees and 33.3 percent (n=9) of the focus group participants.

There was no variation in the race or ethnicity of those responding to the demographic questions (n=34). Of the 34 study participants who responded to the demographic questions, 100 percent were white, not of Hispanic origin.

There were quite a few similarities in the education demographic. Of those responding to the demographics questions, 9 respondents were in each category: high school; Bachelor of Arts (B.A.) or Bachelor of Science (B.S.); and the "Other" category. The B.A. or B.S. degree was held by 28 percent (n=25) of the interviewees and 22.2 percent (n=9) of the focus group participants. Twenty-four percent (n=25) of the interviewees who responded to the demographics questions fell into the High School category for the highest level of education attained, while 33.3 percent (n=9) of the focus group participants fell into this category. None of the responding participants (n=28) had a Doctor of Philosophy (Ph.D.) or a Doctor of Education (Ed.D.) degree.

The group of interviewees appeared to have a higher education level with 52 percent (n=25) holding A.A., B.A./B.S., or M.A./M.S. degrees. Only 33.3 percent (n=9) of the focus group participants hold these degree; however, since it is impossible to tell exactly what "other" really means, it is not certain. Some respondents did qualify "other" when they chose that category. The three focus group respondents who fell into the "other" category listed college degree, which must have been a college degree that was different from the choices listed; C.P.C.U; and a year of trade school. In addition, one of the focus group participants had two Master's Degrees. Of the six interviewees who chose the "other" category, several also qualified their answers: some college, GED, and "Chartered Accountant + Degree."

Overall, the demographic data shows that the greatest number of respondents (n=34) could be described as married, white, females, aged 40 – 54, with either a high school education, a B.A. or B.S. degree, or some other type of education. The greatest number of interviewees (n=25) could be described as married, white, females, aged 40 – 54, with a B.A. or B.S. degree. The greatest number of focus group participants (n=9) could be described as married, white, females, aged 40 – 54, with either a high school education or some type of education other than the choices listed.

Involvement in Online Auctions

Overall, 39 percent (n=41) of the participants in the in-depth interviews and focus group interviews consider themselves full-time online auction sellers. Almost half of the focus group participants (n=11) consider themselves full-time online auction sellers, while only 36.7 percent (n=30) of the interviewees consider themselves full-time online auction sellers. Of the focus group participants who consider themselves full-time sellers (n=5), 40 percent use assistance from spouses or other family members. Of the interviewees who consider themselves full-time sellers (n=11), 72.7 percent use assistance, 25 percent (n=8) use other employees in addition to family members, and 75 percent (n=8) use assistance from spouses and other family members only.

Table 3. Online Auction Sellers

N=41

Category	Interviews N=30		Focus Groups N=11	
	Number	Percent	Number	Percent
Full-Time Sellers	11	36.7	5	45.5
Part-Time Sellers	19	63.3	5	45.5
Declined to Answer	0	0	1	9.0

The remaining 58.5 percent (n=41) of the interviewees and focus

group participants consider themselves to be part-time online auction sellers, while 2.4 percent declined to answer this particular question.

Table 4. Full-Time Positions of Part-Time Online Auction Entrepreneurs

N=24

Position	Interviews N=19		Focus Groups N=5	
	Number	Percent	Number	Percent
Management	4	21.1	0	0
Teacher	3	15.7	1	20
Nursing/Therapist	3	15.7	0	0
Entrepreneur	3	15.7	0	0
Chef	1	5.3	1	20
Full Time Mother	1	5.3	2	40
State Assembly	0	0	1	20
Information Technology Professional	1	5.3	0	0
Sign Maker	1	5.3	0	0
Unemployed	1	5.3	0	0
No Position Named	1	5.3	0	0
Total	19	100.0	5	100.0

All but one of the part-time online auction sellers named the specific full-time positions they hold. Managers and teachers made up the largest number of respondents, with four respondents in each type of

position, or 16.6 percent (n=24) overall. Entrepreneurs, medical-related positions, and full-time mothers following closely, with 3 respondents in each type of position, or 12.5 percent (n=24) overall. Those who are "bricks-and-mortar" entrepreneurs in addition to being online auction entrepreneurs fall into both of Taylor's (1991) categories for entrepreneurs: one owns an ice cream shop and creates corporate gift baskets while another is a farmer and cattle rancher. The third entrepreneur is a freelance writer in addition to being a full-time mother and student; however, I believed that freelance writing placed her in the entrepreneur category. One of the other full-time mothers also runs a daycare center, but as she considered herself a full-time mother first, I placed her in that category. Another full-time mother also helps her husband run another home-based business.

The management positions are varied: two of the positions are office management positions, one in a chiropractic physician's office and one in an engineering firm. Another is a sales manager for an automotive re-manufacturer and a third manages a doughnut shop. One of the management respondents made the statement: "Sometimes online auctioning feels like full time."

Even though online auction selling is a source of income whether full or part time, 12.5 percent (n=24) of the part-time entrepreneurs specifically declared it a "hobby." Of all participants, 19.5 percent (n=41) claimed previous associations with the antiques business through their

own shops, flea markets, or antique mall booths. One of the full-time

sellers had a long-term connection with the antiques and collectibles

business, working in the field for 40 years. Another full-time seller sold

for 16 years in antique malls, saying that it "seemed natural to go

online."

Involvement on eBay

Some of the participants in this study (80.4%; n=33) reported the

length of time that they had been selling at the online auction. The time

periods ranged from 2 months to 72 months with a mean time selling

online of 23 months for the interviewees and 32 months for the focus

group participants. On the average, the focus group participants have

been selling at the online auction for 9 months longer than the

interviewees.

Table 5 Frequency of Online Selling Time in Months

Online Selling Time	Interviews n=24		Focus Groups n=9	
	Frequency	Percentage	Frequency	Percentage
2 months	1	4.2	0	0
3 months	2	8.3	0	0
4 months	0	0	1	11.1
6 months	4	16.8	0	0
8 months	0	0	1	11.1

N=41

Online Selling Time	Interviews n=24		Focus Groups n=9	
	Frequency	Percentage	Frequency	Percentage
12 months	3	12.4	0	0
18 months	2	8.3	2	22.2
24 months	4	16.8	1	11.1
28 months	1	4.2	0	0
36 months	3	12.4	0	0
48 months	3	12.4	2	22.2
60 months	0	0	2	22.2
72 months	1	4.2	0	0
Total	24	100.0	9	100.0

Overall, 26.8 percent (N=41) of these entrepreneurs started out using eBay as buyers, observed the possibility of online selling, and decided it could be profitable. One of these entrepreneurs saw online auction selling as something that "looked like a fun and possibly profitable hobby," while another thought she and a friend would "just try selling a few things and see what happened. It took off on us." One entrepreneur "stumbled onto it after doing a search," began buying and didn't begin selling until 2 years later, when she decided that online auction selling would be a way to sell merchandise that wasn't moving in her store. While actively purchasing things on eBay, another entrepreneur said that her "other half came up with the idea to sell items on eBay as a method of making extra money to invest in our collecting

habit." "Seeing our collection grow so quickly," she went on to say, "made it that much more addicting, and that is why we are still selling today." Purchasing home school materials led another entrepreneur to decide that selling on eBay "looked simple" and that she should try selling. "After I put a few things up for auction and found out how easy it was," she went on to say, "I told my mom and now she does it, too."

The remaining 73.2 percent (N=41) of the study participants found out about eBay in a variety of ways. One person "heard about eBay from an auctioneer, who had expanded his business to include consignments on eBay. From the initial realization that it was something I could do until I put my first item up for auction was probably 6 months." She went on to say that "my first sale was a big thrill and a big financial success. I continue to enjoy the same thrill and financial success." Another entrepreneur "heard about it on the Rosie show and had gone online a few times to see what was there." When her sister-in-law's mother passed away, she realized that they could try to sell the estate on eBay rather than having a garage sale. As an experiment, one entrepreneur who owned a small antique and craft store was taught to sell online by a journalist who wanted to produce an online newsletter to track online auctions and document her selling experiences.

Other entrepreneurs saw online auction selling as a viable second business, a vehicle for selling without the overhead of a shop, or a way to get rid of inventory that wasn't selling in their shops or booths. Others

viewed online selling as a way to stay at home, yet generate an income. Several participants even described online selling as addictive, "like gambling."

Other Variables

Media use, social networks, attitudes toward risk-taking, new technology, innovation, and education were identified by Taylor (1991) as important aspects of his model. The participants in the study were queried with regard to their attitudes toward risk-taking, new technology, innovation, and education. Preferences for different types of media were revealed through questions regarding use of the various information sources on the eBay website (Table 12) and preferred formats of sources for problem resolutions (Table 40), while use of networks was revealed through questions regarding methods used to solve problems (Tables 35, 36, 37, 40). One comment concerning the use of the network of other eBaysians was very revealing of the sense of community and networking on eBay: "I find that the best place to go for help is to other eBayers. If I need to know something all I have to do is mention it in my description or email a buyer. It is like a fraternity and it is powerful."

Risk Taking

Attitudes toward risk-taking were revealed by 82.9 percent (n=41) of the study participants. Of these 34 respondents, 61.7 stated that they did not take risks or were only moderate risk takers. "Cautious" was a descriptor that one person used to describe risk-taking attitude, while

another said, "I never bet on anything except for a sure thing except as amusement." Another respondent showed willingness to risk time but not money. Several respondents used the "if" approach, such as "if it interests me," "if I have some extra money to use," and "if I have the time." Two respondents mentioned the use of information in risk taking: "I don't mind risk, only if you do your homework" and "I take risks only after evaluating all the existing data that is available to me."

Risk-taking was viewed positively without conditions of qualifications by 38.2 (n=34) percent of those responding to this attitude. "I love risk-taking," reported one interviewee. " I am a true gambler at heart. My philosophy is how are you going to do anything or learn anything without taking some kind of risk." Another informant put it this way: "YES I am the push the envelope, where there is a will there is a way, bend the rules, ignore the rules."

All (n=9) of the focus group participants who responded to the attitude toward risk-taking were either moderate risk takers or definite risk takers. None of the focus group participants said they were not risk takers. Eighty-four percent (n=25) of the interviewees who responded to this attitude were either moderate or definite risk takers while 16 percent said that they were definitely not risk takers. Out of the overall respondents to the risk-taking attitude question, only 11.7 percent (n=34) were not risk-takers.

Table 6. Attitude Toward Risk-Taking

N=34

Attitude	Category	Interviews N=25		Focus Groups N=9	
		Number	Percent	Number	Percent
Risk-Taking	Positive	9	36.0	4	44.4
	Moderate	12	48.0	5	55.6
	Negative	4	16.0	0	0

Innovation

Overall, 75.6 percent (n=41) of the study participants responded to the query regarding attitudes toward innovation. All of these respondents (n=31) indicated a positive or moderate attitude toward innovation, although one individual said that innovation was accepted "but with a bunch of grumbling." Another stated her feelings this way: "Sometimes I like to try out a new idea, but if things are working well, I don't like to change just for the sake of changing." Information and learning were important prerequisites to innovation to one interviewee, who reported hesitating "until I can garner enough knowledge to feel confident." Other respondents stated that they were "always innovating," "innovating constantly," "innovating every day," "always looking for a better way to do something," "...always trying new innovations to help me sell more," or "...always open to new ideas and methods if it makes my

day to day duties easier." Almost every one of the positive responses to innovation utilized the word "always." One interviewee made the following statement: "Innovation is something all eBayers and online sellers have to have. You are constantly searching for new markets, items, ways to list, etc. New image hosts, backgrounds, clip art, and graphics top my list right now. If you don't get out there and find the tools of the trade, you don't make it."

Focus group participants (n=8) who responded to this question showed a slightly higher positive response to innovation at 87.5 percent, than did the interviewees (n=23) at 65.2 percent, indicating that the focus group participants harbored less hesitation toward innovation than did the interviewees.

Table 7. Attitude Toward Innovation

N=31

Attitude	Category	Interviews n=23		Focus Groups n=8	
		Number	Percent	Number	Percent
Innovation	Positive	15	65.2	7	87.5
	Moderate	8	34.8	1	12.5
	Negative	0	0	0	0

New Technology

The query regarding attitudes toward new technology elicited responses from 75.6 percent (n=41) of the study participants. Approximately 83.8 percent (n=31) of the attitudes toward new technology were positive. "I love technology," reported one informant, and "always try to find ways to use new technology to my advantage, can't wait for the next invention." One participant responded, "love the gadget stuff," while yet another participant stated: "the more the better (except when it comes to books, i.e. e-books, as a lit major, I'm stuck on the traditional bound, paper books)." The remaining 16.1 percent (n=31) of the informants had a moderate view toward new technology, though all admitted the necessity of its use and their acceptance of its use. For example, "I hated computers and new technology...miss the library and the good old fashion book reading and research. Yet here I am using it to the max...," "Only when my present method is not working. Otherwise I stick with what I know," and "Don't really have a choice in the technology aspect if you want to stay in tune with the world. The old ways won't work anymore but life would be a lot simpler if they did." Some positive comments expressed were about trying new technology with "the help of others" or "a good teacher." One respondent stated this attitude in this way: "I think new technology is the way of the world at this point in time. If you want to work at all, you must learn computer science, etc, or end

up being left behind." The focus group participants had a slightly higher positive attitude toward new technology than did the interviewees.

Table 8. Attitude Toward New Technology

N=31

Attitude	Category	Interviews n=23		Focus Groups n=8	
		Number	Percent	Number	Percent
New Technology	Positive	19	82.6	7	87.5
	Moderate	4	17.4	1	12.5
	Negative	0	0	0	0

Formal Education

Only 58.5 percent (n=41) of the study participants responded to the query regarding attitudes toward education. Both the interviewees (n=16) and the focus group participants (n=8) were equal in positive attitude toward formal education at 87.5 percent. However, the remaining 12.5 percent (n=8) of the focus group participants had a moderate attitude toward formal education, while the remaining 12.5 percent (n=16) of the interviewees had a negative attitude toward formal education. The responses that carried a negative twist were: "Education is good but quality often (not always) varies with price" and "As long as the college and high school teachers are allowed to preach their liberal doctrines and not teach the necessity of living in the real world, we will

continue down the road to eliminating personal responsibility." Positive

responses were rather upbeat: "I love learning...almost 50 and always

taking courses, certifications, and I have many more years to learn lots of

neat stuff!" "I like the challenge of learning," and "Education is a must in

this era. It gives one not only a chance to mature but to gain knowledge.

Without it, where would we be?" One respondent had quite a bit to say

about education: "Lifelong learning is so important. Even if a person isn't

working toward a degree, continuing education classes, college

coursework, or just hobby-inspired classes should be a part of daily (or

weekly, or monthly) life."

Table 9. Attitude Toward Formal Education

N=24

Attitude	Category	Interviews n=16		Focus Groups n=8	
		Number	Percent	Number	Percent
Risk-Taking	Positive	14	87.5	7	87.5
	Moderate	0	0	1	12.5
	Negative	2	12.5	0	0

The Setting

The nature and variety of settings within which these sets of people

operate and the attributes of these settings are important aspects of

Taylor's (1991) model of the information use environment. The

movement of information in these settings, the different types and structures of information, and the means of dissemination in the setting are essential elements to this study. As Taylor stated, "we are concerned with physical context and with ways of describing the context in which a specific class of people usually works and lives, and which affects the way they seek and make use of information" (p. 226). According to Taylor, there are four elements of the setting that influence information behavior: importance of organization, domain of interest, access to information, the impact of time and specialization on the effectiveness of new information, referred to as history and experience.

Importance of Organization

The management of a corporation establishes "an attitude toward information and consequently affects the information behavior of its employees" (Taylor, 1991, p. 227). According to Taylor, activities that are rewarded by management executives within the corporation give clues to the importance of different kinds of information services. Organizations such as this, however, would have little effect on the activities of an entrepreneurial farmer, for example, but would affect the information behavior of financial managers or other corporate employees. However, Taylor asserts that in most cases, entrepreneurs are not affected by any organizational attitudes toward information because they "are" the organization (p. 227).

Taylor (1991, p. 227) stressed the fact that clues to the importance of different kinds of information services can be obtained through observation of the types of activities that are rewarded by management. In the case of entrepreneurship by online auction sellers, individuals operate within the organizational structure of the online auction site, eBay. The organization itself does not reward the activities of the online auction entrepreneurs, however; these entrepreneurs are rewarded by their own hard work in selling their products. In addition, buyers and sellers reward each other through the feedback rating which constitutes their online reputation. So while the eBay organization itself does not reward the entrepreneurs for any kinds of activities, there are certain activities by these entrepreneurs that elicit warnings from eBay management and sometimes suspension of privileges to do business on the website. These warnings and suspensions are usually a result of not following the rules set forth in a variety of places on the website. However, it is evident from some of the postings on the various Help/Discussion Boards that many buyers and sellers are mystified by warnings and suspensions they receive without complete explanations of the rule and the specifics of the infringement.

For example, a posting on the Policies and User Agreement Help/Discussion Board contains the following question:

"I am hoping one of you folks could give me some tips. A friend of mine came home yesterday to find all his auctions ended due to the fact

that his account was suspended. Apparently he was to receive another

mail about the reasons but so far has received nothing. I have hunted

around ebay but have found nothing really conclusive. His emails to ebay

have so far gone unanswered. His account is up to date payment-wise,

there have been no recent negatives, and his items for sale were not

infringing items. Any ideas??? (I am posting this as he cannot access

these boards due to his suspension)."

eBay uses its SafeHarbor web page as a venue for posting its rules;

eBay describes the page as "a comprehensive safety resource and

protective arm." At the SafeHarbor web page, users can make sure they

are "playing by the rules," and can find the user agreement that spells

out the relationship with eBay, guidelines for listing items for sale,

privacy rights, and various other policies. eBay is a self-policing

community; eBay buyers and sellers are encouraged to report what they

believe to be infringements of the various rules and policies. When a

report is received, eBay management investigates the alleged offense and

takes action. As with any other rules or laws, eBay rules and policies are

subject to interpretation by various parties: the person reporting the

infraction, the eBay employee responding to the complaint, and the

person accused of the alleged infraction of the rules. The subjective

nature of the rules process can lead to misunderstandings on the part of

those cited and reprimanded. While as an eBay seller I did not have first

hand experience of rules' infringement and its consequences, as a researcher I encountered them as reported earlier.

Domain of Interest

The important question in this area is "what does the unit of concern do?" The unit of concern could be an organization with thousands of employees or a single practicing attorney. Any domain will have

...certain attributes peculiar to that domain: availability of information, patterns of dissemination, and to some extent the level of reliability. In certain cases, information in the usual sense may in fact be unavailable. This is true especially in farming and engineering (Taylor, 1991, p. 227).

The setting or context in which the online entrepreneurs in this study operate is the eBay online auction.

How Online Auction Entrepreneurs Describe What They Do

The participants in this study were asked to describe in their own words exactly what they do as online auction sellers, spelling out some of their activities during a normal week. "Could you describe your role as an online auction seller? In other words, in terms of a job description, what do you actually do as an online auction seller? What activities?" The following question was: "What are some of your typical activities during a week as an online auction seller?"

Job Title

All but one participant responded to this question in terms of their activities as online auction sellers. One thing I was trying to learn from this question was whether respondents would identify their activities in terms of the variety of different job titles that make up the life of an online auction seller, such as salesperson, secretary, or bookkeeper. However, most of the respondents simply did not understand that I wanted this type of information from the wording of my question. Consequently, most informants described the job of eBay seller in terms of the activities involved in dealing online. Those who did describe the role of the eBay seller in job title terms used such terms as secretary, shopper, sales assistant, packer, shipper, postal clerk, locator, and accountant. One interviewee considered the role of the online auction seller to be "the same as any other retailer," while another participant described his or her particular role as providing easy access to "merchandise customers can't find in their area." One role of the online auction seller was described as a person who would "try to build a better mousetrap." Another descriptor used by a participant was a "regular Jacky of all trades."

Their Activities

Respondents interpreted the "activities" question to refer to activities within the context of an eBay transaction rather than as activities that further describe their roles as entrepreneurs. For example,

more than half (n=41; 60.9%) of the study participants listed their first

activity as finding items to sell. The wording of this activity varied from

person to person including descriptions such as "locate items," "find

product," "buy product," "acquire merchandise," "purchase inventories,"

and "find items to sell." Some participants were more descriptive in this

listing and stated, for example, "scour the area for desirable items that

people would be interested in owning," "look for quality products," or

"always on the lookout for opportunities to purchase things I like that

will bring a good margin."

Table 10. Activities of Online Auction Entrepreneurs

N=41

Activities	Interviews n=30		Focus Groups n=11	
	Frequency	Percent	Frequency	Percent
Finding items to sell	20	66.6	5	45.4
Catalog or process purchases	3	10.0	1	9.0
Wash or polish purchases	1	3.3	0	0
Take photographs	22	73.3	7	63.6
Process photographs	9	30.0	4	36.3
Writing item description or ad	14	46.6	7	63.6
Research	8	26.6	3	27.2

Activities	Interviews n=30		Focus Groups n=11	
	Frequency	Percent	Frequency	Percent
Correspondence with buyers	20	66.6	6	54.5
Packaging and shipping	16	53.3	6	54.5
Collecting payment	13	43.3	2	18.1
Give feedback	7	23.3	2	18.1
Problem solving and customer service	2	6.6	0	0
Record keeping	4	13.3	3	27.2
Track Auctions	4	13.3	1	9.0

Seventeen study participants (n=41; 41.4%) also named their sources for the merchandise they eventually sell: flea markets, yard sales, antique sales, estate sales, garage sales, auctions, malls, antique malls, online, thrift stores, individuals, and wholesale houses.

Table 11. Sources of Items for Online Auction Selling

N=41

Source	Interviews n=14		Focus Groups n=3	
	Frequency	Percent	Frequency	Percent
Flea markets	5	35.7	1	33.3
Yard sales	3	21.4	0	0

Antique sales	1	7.1	0	0
Estate sales	7	50.0	0	0
Garage sales	4	28.5	1	33.3
Auctions	10	71.0	2	66.6
Newspaper	2	14.2	0	0
Antique Malls	5	35.7	2	66.6
Thrift Stores	2	14.2	2	66.6
Individuals	0	0	1	33.3
Online	1	7.1	0	0
Wholesale Houses	0	0	1	33.3

Auctions were by far the most popular source of merchandise, at 70.5 percent (n=17). Not nearly as popular as auctions, but used by 41.7 percent (n=17) of the group who listed their sources, were estate sales and antique malls. Flea markets followed closely behind with 35.2 percent (n=17) of the respondents using them as a merchandise source. In addition, a few participants added the fact that they spent many hours searching for "saleable items" and that they drove for "hundreds of miles" or traveled extensively in this search.

After locating items to sell, several participants (9.75%; n=41) related that they cataloged or processed their purchases, washed and polished the items, or cleaned them. Taking photographs of the items to be sold was a necessary preliminary to placing an item "on a public medium for thousands of people to view and decide if they are interested

in owning," and 70.7 percent (n=41) of the study participants mentioned this as one of their activities or roles as an eBay seller. This was the most frequently mentioned activity (n=41; 70.7%) by the study participants. Then 31.7 percent (n=41) of the participants mentioned activities related to working with the photographic aspect of online selling (e.g., type of camera, processing options, scanning and digitization aspects, posting online, downloading, editing, loading the pictures to the computer, uploading, and preparation) as part of their "roles" or "jobs."

The next most frequently mentioned activity in the chain of activities provided by the study participants was described as correspondence-related activities (n=41; 63.4%); entrepreneurs answer many questions from potential buyers during the run of the auction. Also included is follow-up correspondence that occurs at the close of the bidding and involves an exchange of information between the winning bidders and the sellers regarding payment options, shipping fees and insurance. Packaging and shipping was an activity listed by 53.6 percent (n=41) of the study participants, followed closely by writing the item description or ad, or listing the item (51.2%; n=41). One respondent viewed this activity as marketing, stating that using the proper wording in the description or advertisement is extremely important.

Significantly, only 26.8 percent (n=41) of the participants indicated that they conduct some kind of research before this activity takes place. Reasons for researching an item or a transaction varied. One participant

said that research was conducted using books to identify patterns, keywords to use in the item descriptions, and market pricing. Another cited a newspaper subscription to *Antique Week* used specifically to "keep up with hot items and selling trends." Several other participants claimed that they spent quite a bit of time doing research. One seller spent "hours researching the value of items" and another researches to become familiar with items and prices. This person claimed, "I spend lots of time doing this." Keeping current with fads, trends, and eBay prices were also cited by informants as reasons to spend time researching. One participant claimed to conduct very thorough research so that the item for sale could be "meticulously described." It is not certain, however, whether the other 73.2 (n=41) percent of the study participants conducted any research before they sold an item, as they simply may not have considered this when listing the activities of the online auction seller role.

Access to Information

In many studies, accessibility of information is the variable of most importance in governing the use of information (Gerstenberger & Allen, 1968; O'Reilly, 1979). Taylor (1991) queries: "What effect does the setting have on perceived ease of access to information?" (p. 228). In addition, Taylor (1991) goes on to cite various studies of information use among various populations (Aguilar, 1967; Mintzberg, 1975; Matthews & Stinson 1970; Chen & Hernon, 1982) that demonstrate that dependence

on personal information sources overwhelmingly exceeds dependence on other sources. Personal sources are considered to be personal memory and friends, relatives, colleagues, and peers and are considered to be much more accessible than sources considered to be more formal. (Taylor, 1991, p. 228). Furthermore, Taylor (1991) states that "Formal gatherers of information, e.g., libraries, information centers, management information systems, tend to be too far—both physically and psychologically—from the users of information" (Feldman & March, 1981; Taylor, 1986). The information packages stored and transmitted by the more formal channels seldom match the way people want or use information (Dervin, 1975)" (p. 228).

In an examination of the setting used by the online auction entrepreneurs in this study, I found that the eBay website provided information for users mounted in a number of different formats and channels. Information resources available on the website have grown and developed over time. When I began using eBay in 1997, there was very little information available for users. At the present time, there are many places for buyers and sellers to go to look for information.

My extensive examination of the eBay online auction website revealed that online auction entrepreneurs who worked in the eBay context were indeed operating in an extremely information-rich environment. The eBay Community page provided a wealth of information about eBay and for eBaysians. Several areas of information

from the Community page were analyzed in depth in this study: The Library and 16 Community Help Boards. Five new Community Help Boards have been added since data collection was completed.

In addition to the areas analyzed for this study, the eBay Community area provided General Chat Rooms where members were invited to chat with other members of the community or ask for their advice. Within these general chat areas was a chat area for topics that do not relate to eBay called "The Park." "The eBay Town Square" and "The Soapbox" offered users the opportunity to discuss a variety of topics, share their views, and suggest how to build a better eBay.

The website also provided 20 Category Specific Discussion Boards. There is not a category for the participants in this research study who sell glass. Twenty-five Category Specific Chat Rooms, offer members the opportunity to chat with other collectors about their favorite area. Participants are limited to chatting only and no business. There was a Glass area for the participants in this research study in the Category Specific Chat Rooms.

The "eBay Workshops" Discussion Board was described as home to eBay workshops sponsored by the Community Development team and as a place where users can host their own workshops. A link from the Workshops Discussion Board leads to the "eBay Education" page which consists of links to recorded classes and seminars that users can watch and listen to. Examples include "Buying and Selling in eBay Stores,"

"Selling on eBay," "How to Protect Yourself from Fraud on eBay," and "Recorded Sellers Assistant Pro Lessons." A variety of five-minute narrated tours are also available on the Education page. At present, these tours are viewable on PCs only; in the future, they may be offered for Mac and WebTV. These narrated tours consist of such topics as "How to Register," "How to Buy," "How to Sell," and "How to Use My eBay," among others. The Education page also contains a link to Interactive Tutorials. There are two Interactive Tutorials: "Getting Started" and "Selling on eBay." From the screen of the tutorial there is a link to a live online overview of eBay where the user can even ask the instructor questions. This link consists of descriptions of a variety of classes that eBay has taken "on the road," with classes on all the selling basics offered in October and November of 2001 in Toronto, Canada; Kansas City, Missouri; and Pittsburgh, Pennsylvania, for example. A list of "Top Questions" was also provided on the eBay website. These are similar to what most websites term "Frequently Asked Questions." This analysis of the eBay website demonstrates that it is an extremely information-rich environment supplying information that the users do not even have to leave the website to retrieve, but is this information used by the people in this setting? In an attempt to answer the question in Taylor's model regarding the effect of the setting on the perceived ease of access to information, the study participants were asked if they used the sources provided at the eBay website. Table 12 details just how many of the

study participants actually used the sources provided at the eBay

website at least one time.

Table 12. Usage of eBay Information Sources

N=25

Source	Interviews n=20		Focus Groups n=5	
	Frequency	Percent	Frequency	Percent
Help/Discussion Boards	10	50.0	4	80.0
The Library	1	5.0	1	20.0
General Chat Rooms	3	15.0	2	40.0
Category Specific Chat Rooms	3	15.0	2	40.0
eBay Insider Newsletter	4	20.0	3	60.0
5 minute How-To Tours	3	15.0	3	60.0
Recorded Classes and Seminars	1	5.0	3	60.0
Interactive Tutorials	1	5.0	3	60.0
Live Sessions in Major Cities	0	0	1	20.0
Frequently Asked Questions (FAQs)	13	65.0	3	60.0
Direct eBay Contact	8	40.0	5	100.0

History and Experience

The fourth influence on information that Taylor (1991) delineates is history and experience, stating that bureaucracy is created through the increased specialization that takes place as time passes. This specialization tranforms what were once complex tasks into routine tasks, minimizing the effects of new information. Taylor believes that organizations might absorb large amounts of information with very little effect on activities.

In the case of the eBay website, the organization presents a large amount of information for the users as described in the previous section. At this point we could consider whether the online auction sellers actually use this information to produce some sort of effect on their selling activities, or whether all of this information is rarely used at all. The study participants were asked to respond regarding their use of the various informational sections of the eBay website.

Of the 41 total participants in this study, 25 responded to the questions regarding informational areas of the eBay website that they used. Of the 25 respondents, 20 were interviewees (n=30) and 5 were focus group participants (n=11). Table 12 shows the number of respondents who indicated that they had used each of the information sources. Comments were also made about the usefulness of these sources. In some cases, it is evident that the information source may

have been used only one time and not found particularly useful while other sources were used quite frequently.

Overall, two respondents (8%; n=25) did not use any of the sources mentioned at all. The most frequently used source by all respondents (n=25) to this particular question was the Frequently Asked Questions (FAQs) area. Overall, 64 percent (n=25) used this source, 65 percent (n=20) of the interviewees and 60 percent (n=5) of the focus group participants. Some of the respondents have used this area only "a little," while others "always read the FAQs," or "use them all the time." "I also use the FAQ part, too. Sometimes it's the simple questions that get overlooked in the help topics," was the response of another participant. Mixed responses were also common such as: "Yes, [I used this source] initially throughout the learning process of course, and now when I search for help sometimes I am referred to this area automatically. Sometimes it resolves the problem." While they have used the FAQs, some respondents made a negative or slightly negative comment about their usability: "Yes, I have browsed these many times. And while they do cover many basic questions, I feel the more advanced questions— especially technical issues—have been ignored," "Rarely and they do not address my problem."

The next most frequently used information source on the eBay website was the Help/Discussion Boards, used by 56 percent (n=25) of these respondents. A larger percentage (80%; n=5) of the focus group

participants used the Help/Discussion Boards than did the interviewees (50%; n=20). One respondent said that she used "the help boards more than anything. The search for topics is very easy and reliable." Another respondent stated: "Initially I read EVERYTHING and EVERYONE that eBay had to offer...now however the "Help" features that I refer to on an 'as needed' basis are SAFE HARBOR (when something goes wrong that I haven't already experienced)..." Other Help/Discussion Boards specifically mentioned were Mister Lister Bulk Upload, Bidding, Miscellaneous, HTML, Town Square, and Safe Harbor. Even though this was the second most frequently used source on the website, responses indicate that overall it is used rather infrequently. One respondent said that while they are "occasionally useful...Auctionwatch is 1000 times better." Another entrepreneur "browsed the help boards a few times, mostly the technical ones. I didn't find them particularly helpful, though I noticed that not too many eBay staffers responded to the postings."

Direct eBay contact was the next most preferred information source of the respondents (n=25) to this particular question. Overall, 52 percent (n=25) of the respondents attempted to contact eBay directly; 80 percent (n=5) were focus group participants and 50 percent (n=20) were interviewees. While so many respondents have tried to contact eBay, very few have actually been successful. Comments are mixed about contacting eBay directly. These online auction entrepreneurs seem to be either extremely satisfied or totally dissatisfied with attempts to contact

eBay and elicit assistance. One of the study participants is a Powerseller; consequently, she said that she is "always successful in contacting them, particularly the Powersellers Service." Other positive comments regarding eBay contact were: "Yes, I have tried to contact eBay and was very successful in doing so and was replied to within 24 hours," "Yes, I have always received great support from eBay whenever I turned to them for help," "I have tried reaching them. They tried to help but really weren't very helpful," "Yes, and I was successful." Replies with a more negative connotation were: "Yes, 48 hours later I got an answer to my email. It was too late to help," "I attempted to contact eBay direct. Just after the end of your survey, I received an administrative email. The suggestion was that I was schilling [sic] 'according to my account.' I was furious, as I would never do such a thing. I never received a response. (I am not indicating that the survey had anything to do with the email, just the time frame involved)." Other responses were: "I had problems at the beginning getting my photos to post. Yes, I was successful in contacting them, but it was difficult and time-consuming," "Yes I have tried to contact them on several issues with little satisfaction...but they were unhelpful and their fraud report and insurance claim processes are less than helpful—although I did get paid the insurance," "Yes. Worse than useless. Horrid customer support." Finally, one respondent offered this suggestion: "I have wanted to contact the eBay staff on several occasions. If there is a way to contact them, I have not been able to find it. The only

contact info I have found is for the headquarters. I would like to see eBay institute a 24-hour support hotline or chat room. (Perhaps they have this, but again, I haven't been able to find it, and I'm rather adept at navigating the site)."

The remainder of the information sources listed did not have nearly the number of users as the first three sources mentioned (see Table 12). The *eBay Insider* newsletter and the 5 Minute How-To Tours were the next most frequently used sources, but they did not receive positive comments from these respondents. In many cases, the study respondents responded yes to using the source because they had looked at it one time. Their comments about the sources reveal their true feelings.

When queried about the *eBay Insider*, most respondents had not used it, had not received it, used it "rarely" or used it for the announcements. One respondent related that she didn't "read it often," and another stated that she did not use it but "I guess I should read it instead of fumbling around." Another entrepreneur related that she had "only referred to this a couple of times for two reasons...1) during California Power Outages and Failures the newsletter info for eBay would publish downtimes and if listings were going to be tacked on extra time...they did do this on several occasions...mostly because eBay itself based initially out of San Francisco got burned for hours at a time...2) to verify eBay's FREE LISTING DAYS...when business is slow or for

whatever reason...eBay has offered a specific 24 hour period that ANYTHING you put on carries no charges. So I check on this periodically. Unfortunately this is usually a SURPRISE and Good Luck to catch, as eBay doesn't advertise the freebie days in advance..."

While the 5 Minute How-To Tours were examined by 24 percent (n=25) of the respondents, most of them did not find a use for them. One entrepreneur did use them when she first got started on eBay, going through them "to make sure I understood what I was doing." According to one participant, some of these information sources did not exist when she was new to eBay. Another entrepreneur tried to use the tutorials "but they were slow and the audio and visual were broken (not working simultaneously)." In fact, regarding the Interactive Tutorials that were only mentioned by 16 percent (n=25) of the respondents, one person did not even know they existed until I asked whether she had used them.

Chat rooms received a small number of users from this group of entrepreneurs. General chat rooms and category-specific chat rooms both garnered responses from 20 percent (n=25) of the respondents. Most of the respondents who had not used them stated that they simply did not have the time. One person stated that she had "found a lot of great advice in The Café," while another respondent said that he had "used the glass board for glass identification help many times." One entrepreneur said that she uses the general chat rooms "if I'm having a

problem listing or downloading upgrades, I'll check to see if anyone else is having problems and what they are doing about it."

The Library and the live sessions offered in major cities received the least attention. One person stated she had not checked out the library area yet, while another said she had "read once initially and then never been back. In fact if you hadn't asked, I would have forgotten completely. I had to go to eBay before answering to see if I even had seen it in the first place." Still another participant "generally regarded [the library] as useless," while yet another said she doesn't use the library "but I do use the resources of large bookstores (the kind with coffee and sofas) for an extensive search."

Because the eBay information sources were so infrequently used by the respondents, I asked each of them (n=25): "Of all the information sources you've used to solve problems with online selling, which formats were the most helpful and why were they helpful?" Responses to this question probably gave the most insight into the sources important to the group of online auction entrepreneurs. Personal information sources where contact with an actual person is established were mentioned on twelve occasions in the form of friends, family, computer angel, chat rooms, the glass discussion board, tech support, an IT professor at a local community college, and a network of fellow sellers. Books, libraries, newsletters, and other print sources were mentioned on eight occasions. Several respondents stated that the FAQs and the Help

Boards were the most helpful sources, and several people stated that cruising eBay and watching the auctions on eBay provided the valuable information they needed. One respondent mentioned appraisal shows on television, another mentioned an auction listing service, and several people mentioned message boards outside of eBay.

It was not surprising that recognizing patterns in glassware was very important information to the participants in this study and was reflected in many of the responses. "Easily the glass boards have helped me the most. I have gotten an ID on many, many pieces of 'mystery' glass from that board—and that in turn has both increased my knowledge about glass for when I'm out looking for it in the field and also it helped increase my profits by helping me to more accurately describe what it was that I was auctioning." "My most valuable resources were a couple of reference books that I bought so that I could recognize patterns in glassware. The most helpful thing that I really did was to just cruise eBay and see what was selling for what price in what category. The pictures of the items helped a lot also. I am more a hands on person." "Purchased books on glass particularly. Also looking at closed auctions for price history (less useful now because eBay has reduced its historical search capabilities)."

<div align="center">Problems</div>

The characteristics of typical problems that are experienced by a set of people are another important aspect of the information use

environment. It is not merely the subject matter that defines these problems but also the "nature of the problems themselves which are endemic or deemed important, and hence faced by a particular set of people" (Taylor, 1991, p. 224). In Taylor's (1991) Information Use Environment model it is important to remember that each definable IUE has "a discrete class of problems, spawned by its particular setting and by the exigencies of its profession, occupation, or life style" (p. 225). In order to determine what problems were experienced by the study participants while working in the eBay online environment and as a part of their information use environment, several questions were asked of the focus group participants (Appendix H) and the interviewees (Appendix I). Answers to the first question: "Did you encounter any problems when you decided to get involved in eBay buying and selling? Can you talk about them?" are reported in Table 13, titled "Problems of Beginning eBay Sellers." The next question regarding problems was geared toward determining the problems that were encountered once the participant actually got started with online auction selling and had a bit of experience: "What did you need to know as a beginning eBay seller and how did you find out?" Responses to this question are reported in Table 14, titled "Initial Problems of Online Auction Entrepreneurs." Finally, study participants were asked: "As an experienced eBay seller, do you still have issues and problems, and if so, what do they involve?" to determine just what problems continued to plague this information use

environment even after the participants had online selling experience, or if new problems surfaced with experience. Participant responses to this question are tabulated in Table 15, titled "Problems of Experienced Online Auction Entrepreneurs." I also examined the Help/Discussion Boards on the eBay website in order to determine the types of problems that these online auction entrepreneurs discuss with each other in these public forums in an attempt to secure some assistance. Presentation of these tables and a discussion of the results are found in the following sections.

Problems of Online Auction Entrepreneurs

Perceived Initial Problems

The study participants were asked to discuss their information needs in terms of what they needed to know as beginning online auction sellers and how they found information to address these needs. Participants were asked this question in order to elicit information about problems encountered before they actually began to operate in the online auction environment. These were problems that they could foresee encountering as potential users of the eBay environment. It is possible that if these potential online auction entrepreneurs had viewed these problems as impossible to surmount, they might not initially have entered the online auction environment. Whether or not the information use environment inherent in a particular setting could be utilized to assist with this category of problems is questionable. In the case of the

eBay online auction environment, various portions of the resources in the IUE could be used, but if the person making a decision were not a registered user, then all of these resources would not be available for use in the decision process.

Of the 41 participants in this study, 34 participants (82.9%) responded regarding what they needed to know as a beginning online auction seller. The 25 interviewees (73.5%, n=34) gave 48 responses regarding things they needed to know when they started selling online and the nine focus group participants (26.4%, n=34) gave 18 responses on this topic.

Overall, the topics of digital cameras, uploading photos, and manipulating photos were the most important areas of knowledge needed for a beginning online seller, according to these respondents (n=34) and these items made up 37.9 percent (n=66) of the responses. However, while the interviewees found this to be the most important knowledge they needed (43.7%, n=48), the focus group participants believed that knowing how to use eBay was the most important knowledge (33.3%, n=18) they needed as a beginning online auction seller. Knowledge of how to use eBay garnered the second highest number of responses from this group (n=34).

Table 13. Initial Problems of eBay Entrepreneurs

N=41

Category	Interviews N=25		Focus Groups N=9		Overall N=34
	Frequency	Percent	Frequency	Percent	Percent
Photos/Digital Camera	21	43.7	4	22.2	37.9
How to Use eBay	3	6.2	6	33.3	13.6
Merchandise Knowledge and Value	5	10.4	2	11.1	10.6
Computer Skills	3	6.3	2	11.1	7.6
Ad/Listing Writing	2	4.2	3	16.7	7.6
Customer Service	4	8.3	0	0	6.1
Technical Knowledge	3	6.2	0	0	4.5
Buying Inventory	2	4.2	0	0	3.0
Packaging	1	2.1	1	5.6	3.0
HTML	2	4.2	0	0	3.0
Buying Supplies	1	2.1	0	0	1.5
International Money	1	2.1	0	0	1.5

Category	Interviews N=25		Focus Groups N=9		Overall N=34
	Frequency	Percent	Frequency	Percent	Percent
Total	48	100.0	18	100.0	99.9

Merchandise knowledge and value was another important area of concern for beginning online auction sellers. This area received the third highest number of responses overall (10.6%; n=66) and was the second highest area of concern for interviewees (10.4%; n=48) and the fourth highest area of concern for the focus group participants (11.1%; n=18). Computer skills ranked fourth highest overall of skills needed for beginning online auction sellers (7.6%, n=66). Basically, of those responding to the question regarding knowledge necessary for beginning online auction sellers, the interviewees (n=25) and focus group participants (n=9) differed considerably regarding the knowledge they believed important for a beginning online auction seller. Table 13 details the overall responses regarding the knowledge important to a beginning eBay seller in addition to how each of the responding groups (interviewees and focus groups) responded.

Beginning Seller Problems

The participants in this study were asked to describe the problems, if any, they encountered after they decided to pursue online selling. While four participants stated that they had no problems at all, or no problems at first, one participant stated: "Everything was a problem.

Just the time I get it figured out eBay changes things." Several
participants stated that they had a "few problems getting started" and
proceeded to list those problems.

Table 14. Beginning Problems of Online Auction Entrepreneurs

N=41

Category	Interviews n=28		Focus Groups n=11		Overall n=39
	Frequency	Percent	Frequency	Percent	Percent
Photos/Digital Camera/HTML	9	20.0	4	17.5	19.1
Trust and Safety (non- paying bidders, dishonesty)	4	8.9	5	21.8	13.2
Computer Literacy	5	11.1	1	4.3	8.8
Packaging and Shipping	3	6.7	3	13.1	8.8
Auction Listings (writing ads, merchandising)	2	4.4	1	4.3	4.4
Customer Service	5	11.1	0	0	7.4
Payment/Billpoint	2	4.5	1	4.3	4.4
Record Keeping/Bookkeeping/Taxes	1	2.2	2	8.8	4.4
Business Issues (Licenses)	1	2.2	0	0	1.5
Organization	2	4.5	1	4.3	4.4
Reputation	2	4.5	0	0	2.9
Equipment Purchasing	1	2.2	0	0	1.5
Seller Assistant Software	1	2.2	0	0	1.5
Website Changes (eBay)	0	0	1	4.3	1.5
Technical Issues	1	2.2	0	0	1.5

Category	Interviews n=28		Focus Groups n=11		Overall n=39
	Frequency	Percent	Frequency	Percent	Percent
Product Knowledge and Identification	1	2.2	1	4.3	2.9
Getting Started (motivation, information)	1	2.2	0	0	1.5
Privacy	2	4.5	0	0	2.9
International Trading	1	2.2	0	0	1.5
Storage	1	2.2	0	0	1.5
Pricing	0	0	3	13.0	4.4
Total	45	100.0	23	100.0	100.0

Difficulties related to digital cameras, working with digital photos, or storing and uploading digital photos were the most frequently mentioned problems overall. One participant summed up the photo situation quite well: "The first huge problem was learning about the digital camera because as we all know, you cannot selling anything on eBay without a picture. [Thus] I had to learn about a digital camera that took a floppy disc, how to clean up the picture & then learn to store them on JPEG program." Other respondents agreed, claiming that: "photos were a huge challenge in the beginning," "camera software and eBay don't tell you how to move transfer or adjust pictures." Others noted the expense of lighting, managing editing tasks, the difficulties in photographing glass objects, the expense of the equipment, and the

problems encountered in trying to provide "storage of photos" needed to run multiple auctions at the same time.

For the interviewees, photo-related problems were also the most frequent (20%); however, trust and safety issues (21.7%) such as non-paying bidders or dishonesty were the most frequently mentioned problems of the focus group participants. Trust and safety issues were also the second highest (13.2%) area of concern overall.

Many major problems of the new online auction sellers had to do with using technology. The following statement was typical for this group of eBay sellers: "...I had lots & lots & lots of problems getting started on eBay, because you might say that I cut my computer learning teeth on eBay...in fact, I hated computers & have never even been near one except when checking my purchases out at Sears or the market." Others characterized their problems in terms of "becoming computer literate," "being computer illiterate," and "computer literacy, [although] it got better as we went along." Another participant listed the major problems she had in the beginning, which included "computers" and "dealing with computer geeks." For others, even purchasing a computer posed problems; indeed, one interviewee complained that the pain of dealing with the electronics company was "second only to having a baby or a root canal."

Packaging and shipping problems scored relatively high as a problem area for this group of study participants. This problem was

mentioned six times (8.8%) overall. Determining weight "packing thoroughly," and learning packaging techniques (e.g., "in bubble wrap and peanuts,") were specific activities that posed problems. "Shipping costs were underestimated until I acquired an accurate scale and packaging was trial and error for a while," offered one respondent. Another stated that "learning how to pack things so they didn't get broken" was a major problem." Although some respondents referred to buyers in positive terms, the behavior of some customers was a problem for some informants in this study. One reported that a buyer "was very intimidating."

According to a respondent who had 20 years of "off-line" retail experience, the "problems of online selling are the same as bricks and mortar" such as, "people who don't complete online transactions (like lay away), bad checks (fewer online by far), and overly picky customers who want to return everything they purchase." Other types of initial problems listed were changes on the eBay website, online credit card services, storage space, tax paperwork, dissatisfied customers, listing items, maintaining privacy, establishing prices to charge, determining what to sell, taking online payments, using Seller Assistant software, organization, and using HTML to jazz up listings.

Experienced Seller Problems

Participants were asked to relate how their problems had changed as they gained experience selling online.

Table 15. Problems of Experienced Online Auction Entrepreneurs

N=41

Category	Interviews n=30		Focus Groups n=9		Overall n=39
	Frequency	Percent	Frequency	Percent	Percent
Photos/Digital Camera/HTML	1	2.3	0	0	1.8
Trust and Safety (non- paying bidders, dishonesty)	14	31.8	6	54.5	36.4
Computer Literacy	0	0	1	9.1	1.8
Packaging and Shipping	1	2.3	0	0	1.8
Auction Listings (writing ads, merchandising)	1	2.3	1	9.1	3.7
Customer Service	3	6.8	0	0	5.5
Payment/Billpoint	1	2.3	1	9.1	3.7
Record Keeping, Bookkeeping and Taxes	3	6.8	1	9.1	7.3
Storage	1	2.3	0	0	1.8
Finding Business Supplies/Suppliers	1	2.3	0	0	1.8
Flooded Market	1	2.3	0	0	1.8
Feedback	0	0	1	9.1	1.8
Seller Assistant Software	1	2.3	0	0	1.8
Website Changes (eBay)	2	4.4	0	0	3.7
Technical Issues	1	2.3	0	0	1.8
Finding Items to Sell	6	13.6	0	0	10.9
Product Knowledge, Identification, and Valuing	5	11.3	0	0	9.0

Category	Interviews n=30		Focus Groups n=9		Overall n=39
	Frequency	Percent	Frequency	Percent	Percent
International Trading	1	2.3	0	0	1.8
Time	1	2.3	0	0	1.8
Total	44	100.0	11	100.0	100.0

Overall, trust and safety issues such as non-paying, slow-paying bidders, and dishonest bidders moved to the top of the problem list for online entrepreneurs as they gain experience in this venue. Out of the number of problems named, this was cited 36.4 percent of the time. The problems with digital photos, digital cameras, and HTML, which were so prevalent with new online auction sellers, were only mentioned in 1.8 percent of the responses. Finding items to sell and identifying and valuing what is being sold are important issues for the experienced sellers, garnering 19.9 percent of the responses. It appears as though experience moves some problems to the bottom of the list, making way for others to move to the top.

Though one seller was more confident with digital photos than in the beginning, he still had problems capturing glass patterns and colors correctly in photos. The glare problem inherent in photos of glass also created difficulties for him. Another study participant stated "nonpaying bidders and feedback bombers are big problems now."

Problems Revealed Through Document Analysis: Help/Discussion Boards, The eBay Library, and eBay Newsletters

In order to avoid the risk that my conclusions would reflect the biases or limitations inherent in the data gathered only from the online focus groups and online interviews (Maxwell, 1996), I examined various portions of the eBay website in an attempt to target additional problems and concerns of eBay online auction entrepreneurs. Through this document analysis, I also expected to learn how the online auction entrepreneurs attempted to solve their problems, the types and formats of information they requested to solve their problems, and the types and formats of information that eBay provided for their use in solving problems. I thought that it might also be possible to learn whether the eBay information provided a satisfactory solution to the problems encountered as an online auction entrepreneur. This document analysis allowed me to determine whether the problems cited by the interviewees and focus group participants were similar to those experienced by the other online auction entrepreneurs using the eBay website.

For this document analysis, I chose to use the Help/Discussion Boards on the eBay website (reported in Tables 16-34), the Library area of the eBay website, and the online newsletter originally titled *eBay Life*. The title was later changed to *eBay Insider* before publication ceased. I could not analyze *eBay Insider*, however, because I neglected to officially subscribe to this newsletter.

From the dates falling within the four months of the study, May through August, 2001, 28 dates were drawn randomly. Data was collected from the postings to each of the eBay Help/Discussion Boards for each the dates drawn. The eBay Help/Discussion Boards are located in the Community Area of the eBay website. Registered eBay users can post messages or questions on these boards; these may receive a response from another eBay user or, on occasion, eBay personnel. During the 28 days sampled for the study there was a total of 10,346 postings to all of the Help/Discussion Boards. Each of these Help/Discussion Boards and the total number of postings during the sampled dates is listed in Table 1 in ascending order by total number of postings. Each of the postings was examined to identify specific topics, concerns, and comments.

As one may note from the titles of the Help/Discussion Boards, eBay management has attempted to categorize the types of questions asked and comments made by developing these 17 categories. Emergence of new question and comment topics that would be better served with a separate Help/Discussion Board are most likely determined by viewing threads of conversation appearing in existing Help/Discussion Boards. For example, in response to the terrorist attacks on the United States that occurred on September 11, 2001 and the weeks that followed, eBay launched an "Auction for America" program. A Help/Discussion Board was also established on this topic.

I also determined from the interviews and focus groups that 56

percent of the study participants who responded to this question (n=25)

had used the help/discussion boards as a source for problem-solving.

This narrowed down to 50 percent (n=20) of the interviewees and 80

percent (n=5) of the focus group participants who had used the

help/discussion boards.

Table 16. Number of Postings to eBay Help/Discussion Boards, May -
August, 2001.

Help/Discussion Board	Total Number of Postings per Board	Percentage of Overall Total
Auction Listings	1,434	14.0
Feedback	1,211	11.8
Bidding	1,137	11.1
Technical Issues	1,021	10.0
Trust and Safety	965	9.4
Photos/HTML	826	8.1
Miscellaneous	812	7.9
Mr. Lister	650	6.3
Payment/Billpoint	595	5.8
Packaging and Shipping	485	4.7
Policies/User Agreement	343	3.3
International Trading	209	2.0
Search	191	1.9
My eBay	146	1.4

Help/Discussion Board	Total Number of Postings per Board	Percentage of Overall Total
Registration	169	1.7
Escrow/Insurance	62	.6
Total Number of Postings	10,256	100.0

It should be noted that topics and comments posted to specific boards may not always reflect the "title" of the board, nor are the boards mutually exclusive with regard to postings. For example, while there is a Help/Discussion Board on Photos/HMTL, there are still questions and problems related to photos found in several of the other Help/Discussion Boards. In addition, it must be remembered that, unlike the interview and focus group data, the postings to these Help/Discussion Boards are not only from sellers, but also from buyers.

Auction Listings Help/Discussion Board

Information on the eBay website describes this Help/Discussion board as a place for members to learn more about auction listings from other community members with support from the eBay staff. An examination of the 1,434 postings revealed that this Help/Discussion Board is a "catch-all" for topics that might more properly be discussed on other Help/Discussion Boards. This may be due to the fact that the category name itself has such broad implications, as well as its location as the first category listed on the website.

Table 17. Auction Listings Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Technical Problems	225	15.7
Listing not Showing	119	8.3
Photos	71	4.9
Relisting	69	4.8
Non-responding bidders	43	3.0
Fees	33	2.3
Specific Items	32	2.2
Rules	27	1.9
Where to List	26	1.8
Auction Cancellation	21	1.5
Listing Title Changes	21	1.5
Fraudulent Auctions	20	1.4
Free Listing Days	18	1.3
Buy It Now	16	1.1
Reserve Auctions	16	1.1
Ending Auction Early	14	1.0
Counters	14	1.0
Newbie Questions	13	.9
Dutch Auctions	13	.9
Local Auctions	10	.7
Listing Software	10	.7
Contacting eBay	10	.7
Online Payment	10	.7

Category	Number of Postings	Percentage of Total
Closed Auction Access	10	.7
Changes on Website	9	.6
Ad/Photo Stealing	9	.6
Gallery Listings	9	.6
No Bids Received	8	.6
Feedback Retaliation	8	.6
Leaving eBay	8	.6
Featured Auctions	7	.5
Bid Retractions	6	.4
Bid Blocking	5	.3
Postal Insurance	3	.2
Selling to Second Highest Bidder	3	.2
Miscellaneous – No Set Category	498	34.7
Total	1434	100.0

Postings that were so varied that they really could not be categorized made up 498 postings, or 34.7 percent of the 1,434 postings on this help board. Over 15 percent of the postings concerned technical problems. These postings could be described as complaints about all aspects of the eBay system that were not working properly and questions asking "how to do" certain procedures on the website.

Another area of high postings related to concerns about the timeliness of auction listings; many users voiced complaints about delays

in the posting of auctions. This problem garnered much concern from the eBay users making the postings and is probably the category of postings that belongs on this Auction Listings Help/Discussion Board because it deals exclusively with auction listings. Problems with photos in listings caused some concern (4.9 percent), and problems relisting items that had not sold previously were cited as 4.8 percent of the total listings. While this was obviously a technical problem, it was so prevalent that it deserved its own category. Non-responding buyers and sellers also had quite a few postings. Concern about whether certain types of items were auctionable made up 2.2 percent of the postings in this category. There were also several threads on Nazi items, in addition to a question about somebody selling horse sperm. In another posting a user asked why Official Olympic items auctions had been deleted. Clearly, unawareness or misunderstanding of eBay rules is evident from these types of postings, and another 1.9 percent of the postings in this category were related to rules defining saleable items. Table 17 categorizes the postings on this help board into 35 different categories that contain 936 of the 1,434 postings; 498 postings were still too varied to permit definitive categorization.

Feedback Help/Discussion Board

The Feedback Help/Discussion Board can be used to learn more about feedback, a numbered rating for each buyer and seller attained through participation in a transaction. A positive comment given by

another user regarding a shared transaction raises the feedback rating

while a negative comment lowers it. Since feedback ratings instantiate an

eBay seller's online reputation, this feedback number is considered very

important by eBay users.

Table 18. Feedback Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Technical problems	98	8.1
Undeserved negative feedback	65	5.5
No feedback given	36	3.0
Retaliatory negative feedback	34	2.8
Non-paying bidders	34	2.8
Non-responding buyers and sellers	28	2.3
Should negative feedback be given?	28	2.3
Neutral feedback	25	2.1
Paid, no merchandise received	25	2.1
Feedback total incorrect	23	1.9
Removing negative feedback	21	1.7
Newbie questions	21	1.7
Can't leave feedback	21	1.7

Category	Number of Postings	Percentage of Total
Feedback retraction	20	1.7
Bad sellers	18	1.5
Fraud	17	1.4
Feedback blackmail	17	1.4
Accessing older feedback	16	1.3
Private feedback	13	1.1
Not a registered user (NARU)	12	1.0
Feedback disappeared	11	.9
Need help from eBay	11	.9
Timeline for feedback	11	.9
Harassment	10	.8
More charges at transaction end	10	.8
Pinks	9	.7
Bad bidders	9	.7
Photos	8	.7
Refunds	7	.6
One cent feedback sales	7	.6
Feedback not working	7	.6
Too much negative feedback	7	.6
First negative feedback	7	.6
PayPal	6	.5
Sniping	6	.5
Shipping	6	.5

Category	Number of Postings	Percentage of Total
Incorrect e-mail address	5	.4
Bid or auction cancellation	5	.4
Buy it now	4	.3
Free listing day	4	.3
Multiple user IDs	3	.2
Special items	3	.2
Suspension	3	.2
Constant sign-in	3	.2
Feedback rights	2	.2
Shill bidding	2	.2
Miscellaneous, not categorized	473	39.1
Total	1,211	100.0

Though the largest percentage of postings were those that were too varied to permit definitive categorization (39.1 percent), technical problems consisting of complaints about feedback features that did not work at all or did not work correctly, and questions about how to accomplish certain tasks related to giving and receiving feedback, made up 8.1 percent of the total postings.

Other major topics of concern reflected in the 1,211 postings are the receipt of undeserved negative feedback (5.5 percent), and failure to receive any feedback at all, resulting in having no opportunity to build reputation (3.0 percent). Non-paying bidders, a concern expressed on six

of the 16 help/discussion boards, made up 2.8 percent of the postings to this board.

The category of buyers or sellers who do not make contact or follow through on a transaction made up 2.3 percent of the postings to this help/discussion board, as did the question of whether negative feedback should be given. Fear of retaliation makes this question a critical concern on this particular help/discussion board. The problems of dealing with what users call "feedback retaliation" also made up 2.8 percent of the postings to this board. Feedback retaliation means that once either the buyer or seller posts negative feedback, the other partner in the transaction also posts negative feedback, though unwarranted, in retaliation. In fact, in one of the few reactions that one focus group member had to the comment of another was this question" "Do you leave negative feedback to your nonpaying bidders? What can you do if they retaliate and leave you a negative?" The response from the other focus group member was: "I tried leaving negative feedback and got into such a mess I said I will never do it again...and told e-bay that even if they stole the store. I shipped her merchandise (assuming that she had responded to eBay's letter). She indicated that I had stolen her check and reported me to the square deal folks. I don't check feedback. It would only upset me...and if you have done all you can and the customer is still not happy what else can you do?" There were some pleas (11, .9 percent) directly to eBay on this board, asking for assistance in solving these problems.

Several eBay employees must monitor this particular help/discussion board as these postings were often directed to Gianni or Kelly, whom I determined to be eBay employees from their e-mail addresses.

Trust and Safety Help/Discussion Board

This Help/Discussion Board is an area for eBay users to discuss integrity issues and learn more about safety initiatives from other members and eBay staff. The major issues and concerns that were observed during the study involved fraudulent auctions (6.7 percent), items paid for but never received (5.9 percent), illegal items being sold (meaning items against eBay rules), illegal activities (doing things against eBay rules) (3.4 percent), and non-responding bidders (3.1 percent). Several community members were specifically addressed by name on this board and asked for assistance: Base and Daphne. Upon examination of the website, I determined that Daphne is an eBay employee, but I could not determine whether Base, which is short for basestealer, is an eBay employee.

Table 19. Trust and Safety (Safe Harbor) Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Fraudulent auctions	65	6.7
Paid, no merchandise received	57	5.9
Illegal items/activities	33	3.4

Category	Number of Postings	Percentage of Total
Non-responsive buyers/sellers	30	3.1
Not a Registered User	27	2.8
Feedback	26	2.7
Non-paying bidder	25	2.6
Refunds	25	2.6
Harassment	23	2.4
Misrepresentation	23	2.4
Fakes	22	2.3
Scams	18	1.9
Ripped off	16	1.7
Shills	16	1.7
Special Items	15	1.6
Suspension	14	1.5
Bad sellers	14	1.5
Bid blocking	13	1.4
Contact information	11	1.2
Lost package	11	1.2
Pinks	10	1.1
Buy it now	10	1.1
Bid cancellation	9	.9
Bid retraction	9	.9
Contact eBay	9	.9
E-mail not good	7	.7
Ended auctions	7	.7
Bad checks	6	.6

Category	Number of Postings	Percentage of Total
Returns	6	.6
Stolen pics	6	.6
Unconcern of eBay	6	.6
About me page	5	.5
Bad buyer	5	.5
Rules	5	.5
Spam	5	.5
Excessive shipping	4	.4
ID changes	4	.4
Insurance claim	4	.4
Lost payment	4	.4
Newbie Questions	4	.4
Questions to Base	4	.4
Keyword spam	3	.3
Workshop	3	.3
Relisting	3	.3
Private auctions	3	.3
Timelines	3	.3
Second Highest Bidder	3	.3
Money orders	3	.3
Fraud insurance – eBay	2	.2
Package damage	2	.2
Paid for received no insurance	2	.2
Pirated movies	2	.2
Reserve auctions	2	.2

Category	Number of Postings	Percentage of Total
Underaged bidding	2	.2
Terms broken	2	.2
Question to Daphne	2	.2
Dutch auctions	1	.1
Passwords	1	.1
Racist remarks	1	.1
Safe payment methods	1	.1
Sign in constantly	1	.1
Stolen account	1	.1
Sniping	1	.1
Cash payment	1	.1
Miscellaneous	307	31.8
Total	965	100.0

Bidding Help/ Discussion Board

Buyers and sellers can discuss bidding with assistance from eBay staff on this board. Topics of concern that emerged from examination of the 1,137 postings to this help/discussion board were sniping and sniping tools (6.2 percent), changing a maximum bid (7.7 percent), bid retraction (9.9 percent), and non-responding buyers and sellers (2.8 percent).

Table 20. Bidding Help/Discussion Board

Category	Number of Postings	Percentage of Total
Bid retraction	112	9.9
Bid size	87	7.7
Sniping	71	6.2
Buy it now option	44	3.9
Newbie questions	38	3.3
Reserve auctions	37	3.3
Technical problems	33	2.9
Non-responding buyers and sellers	32	2.8
Timelines	26	2.3
Non-paying bidders	25	2.2
Bid blocking	22	1.9
Contact information	18	1.6
Bid cancellation	17	1.5
Shill bidding	16	1.4
Bad sellers	15	1.3
Outbids	14	1.2
Bid history	13	1.1
NARU (no longer a registered user)	13	1.1
Dutch auctions	13	1.1
Illegal items/activities	12	1.1
Feedback	11	1.0
Ended auctions	10	.9
Paid, received no merchandise	9	.8

Category	Number of Postings	Percentage of Total
Proxy bidding	9	.8
Shipping	8	.7
E-mail not valid	8	.7
Special items	7	.6
Selling to second highest bidder	7	.6
Bad buyer	7	.6
User ID change	6	.5
Contact eBay	6	.5
Fraudulent auctions	6	.5
Scams	5	.4
Bidding against self	5	.4
Pinks	4	.4
Fakes	4	.4
Misrepresentation	3	.3
Suspension	2	.2
Sales tax	2	.2
My eBay	2	.2
Miscellaneous	358	31.5
Total	1,137	100.0

The topic of bid retraction had the most postings (9.9 percent), and users were concerned with the circumstances under which it was allowable to retract a bid and the actual mechanics of retracting a bid (how-to). There was also some concern whether there needed to be a "good excuse" for retracting a bid. Bid size (7.7 percent) was another topic of concern,

especially the ability to change the amount of a minimum or maximum bid. Because the "system" sets the bid increments, it also sets the next minimum bid after the first bid has been made. Users questioned whether this could be changed somehow. Sniping (6.2 percent), or placing a bid in the closing minutes or seconds of an auction, was also a high area of concern. Though sniping is a perfectly "legal" activity, some users dislike this practice. The categories of non-responding buyers and sellers (2.8 percent), timelines (2.3 percent), and non-paying bidders (2.2 percent) are all semi-related. The timeline category directly related to non-responding buyers and sellers, as users are continually questioning how long it should take to be contacted by the trading partner, how long it should take to receive payments, and how long it should take to receive shipments. The non-paying bidder category directly relates to timelines, as users question at what point they should consider a bidder to be non-paying. Shill bidding (1.4 percent) was another concern, leading buyers to be constantly on the lookout for friends or relatives, or even the seller himself bidding on an auction to make the selling price higher.

Technical Issues Help/Discussion Board

eBay users can learn more about the software and hardware used to support trading transactions on the eBay website on this board. While I expected that some of the postings on this board would be "how-to" questions, most postings were complaints about features on the website that were not working properly.

Table 21. Technical Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Cannot list items to sell	88	8.6
Photo problems	76	7.4
E-mail problems	65	6.3
Cannot search	41	4.0
Cannot relist	40	3.9
Plea for help from eBay and contact information	37	3.6
Can't view listings or pages	35	3.4
Javascript errors	26	2.5
Revising auction listing	22	2.1
Repeated sign in	20	1.9
My eBay	16	1.6
Feedback	16	1.6
Proxy bidding	14	1.3
Downtime at eBay	13	1.3
Cannot bid	13	1.3
About me page	13	1.3
Honesty counters	13	1.3
Internet Explorer	13	1.3
Seller assistant software	12	1.2
Fraud	10	1.0
Passwords	8	.8
Newbie	7	.7

Category	Number of Postings	Percentage of Total
Buy it Now	7	.7
Scams	6	.6
Pop-up windows	6	.6
Billpoint	6	.6
Items not in database	5	.5
Changing bid	5	.5
Fakes	4	.4
Misrepresentation	4	.4
Spam	4	.4
Links to other auctions	4	.4
How-to questions	4	.4
Special items	3	.3
Outbid self	3	.3
Non-paying bidders	3	.3
Secure server errors	3	.3
Bad bidders	2	.2
Threatening e-mail	2	.2
Refunds	2	.2
Stolen photos	1	.1
Not a registered user (NARU)	1	.1
Selling to second highest bidder	1	.1
Best day to list	1	.1
Non-responding buyers/sellers	1	.1

Category	Number of Postings	Percentage of Total
More money demanded at auction end	1	.1
Blocked bidders	1	.1
Miscellaneous, not categorized	343	33.6
Total	1,021	100.0

The most frequently mentioned issues among the 1,021 postings on this help/discussion were those relating to photo problems (7.4 percent), JavaScript errors (2.5 percent), inability to list new items for sale (8.6 percent), re-listing previously unsold items (3.9 percent), problems with changing e-mail addresses and making e-mail contact (6.3 percent), problems searching (4.0 percent), and pleas for help from eBay (3.6 percent). In addition, auction listings that were posted but could not be located in a search made up 3.4 percent of the postings to this help/discussion board. Other major concerns were the difficulties experienced when trying to edit auction listings (2.1 percent) and the frustration with the system's requirement of signing in many times during use (1.9 percent). As one user's posting was titled on the help/discussion board, "Sign in, please, for the 129th time."

Photos/HTML Help/Discussion Board

According to the eBay website, this Help/Discussion Board exists to help users learn more about Hypertext Markup Language (HTML) and

photo hosting services. Two major concerns involved the uploading of photos that are not visible once they have been uploaded. Several different photo services were discussed in light of problems experienced by the users. Specifics of working with photos were often posted, as were questions related to picture taking, equipment purchases, resizing the photos (making them smaller or larger), cropping the photos, and dealing with photos that are too dark or appear to have a colored haze over them. One user asked for specific help on how to take a digital photo of black clothing. Advice about photo equipment was also sought by users, such as what kind of digital camera to purchase, how to use the scanner correctly, and what type of image editing program is the best.

While this Help/Discussion Board has a title of Photos/HTML, the subject of most of the postings was photos. Only a few questions were noted regarding JavaScript (1.7 percent), HTML (3.6 percent), animation (.5 percent), and using text and tables correctly. As on other Help/Discussion Boards, users asked how to reach eBay customer service. One particular eBay community member, Bobal, seemed to be an expert or authority on this Help/Discussion Board as many users asked this person questions specifically by name (6.2 percent). Another community member, Pink Gweneth, had several questions directed to "her" also (.4 percent). This was a fairly high traffic help/discussion board with postings that made up about 8 percent of the total help/discussion board postings in this study (see Table 16). Overall, the

major concern seems to be pictures that are not visible on the auction

listings after uploading. Because of the wide variety of topics on this

particular help/discussion board, this most popular topic only made up

6.5 percent of the total postings (826) to this board. It was interesting

that the questions directed to the community member expert, Bobal,

make up 6.2 percent of the overall postings (826) to this board. As a

sidebar on this discussion board, there was a link to a "Common HTML

Tags Guide" and a link to "eBay's Photo Tutorial."

Table 22. Photos/HTML Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Uploaded photos not visible	54	6.5
Questions directed to Bobal	51	6.2
Can't upload photos	47	5.7
eBay's photo hosting service	40	4.9
Photo hosting services	35	4.2
Photo size	34	4.1
HTML	30	3.6
How to post photos to eBay	30	3.6
Problems with photos when relisting	22	2.7
Digital camera questions	20	2.4
Adding photos to existing listings	19	2.3

Category	Number of Postings	Percentage of Total
IPIX	18	2.2
JavaScript	14	1.7
BayPal and Baytown	14	1.7
Gallery	14	1.7
Photos disappearing from listing	14	1.7
Boomspeed	13	1.6
Frustration	13	1.6
Thumbnail photos	12	1.5
Contacting eBay	11	1.3
Adding more than one photo to a listing	11	1.3
Photo quality	11	1.3
Photo mechanism not working	11	1.3
About me page	10	1.2
Incorrect URLs	8	1.0
Photo stealing	7	.9
Adding icons to listing	6	.7
Editing auction photos	5	.6
PhotoPoint	5	.6
Revising photos	5	.6
Adding music to listing	5	.6
Newbie questions	5	.6
File Transfer Protocol	5	.6
Mister Lister photos	4	.5

Category	Number of Postings	Percentage of Total
Free listing days	4	.5
Scanner problems	4	.5
Adding animation to listing	4	.5
Photos causing computer to freeze up	3	.4
Questions directed to Pink Gweneth	3	.4
No photo, no bid	3	.4
Listings questions	3	.4
How to take good photos	2	.2
Picture It photo software	2	.2
Placing photos in tables	2	.2
Photo tutorial	1	.1
Firewall problems	1	.1
Locating old auction listings	1	.1
Page hit counters	1	.1
Miscellaneous	189	22.9
Total	826	100.0

Miscellaneous Help/Discussion Board

The 812 postings on this help/discussion board rank it as seventh

highest in the number of postings during the period of this study. This

Help/Discussion Board was a "catch-all" for a large variety of questions.

A great number of queries on this board involved trying to contact eBay

support (1.2 percent); however, most of the topics on this Help/Discussion Board were the same topics discussed on the other boards. It was very difficult to categorize these postings because they were so varied. Because this was the "miscellaneous" board there was little guidance regarding what was proper to post here.

The most unique discussion topics in this category involved several users' theories on the JFK assassination (.4 percent), a query as to how many people had ever seen fairies or had pictures of fairies, the plea of desperate parents for assistance in finding their missing child, and a request for a good recipe for Picante sauce. As one can easily see, these topics are totally unrelated to using the eBay website; however, the discussion board title was "miscellaneous."

The largest number of postings on this board was devoted to obtaining contact information for buyers and sellers (3.3 percent), while obtaining e-mail addresses and changing e-mail addresses was a topic that made up 2.6 percent of the total postings. The always-present buyers and sellers who are slow or non- responsive in auction transactions made up 2.5 percent of the total postings to this board.

Table 23. Miscellaneous Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Contact information	27	3.3
E-mail	21	2.6

Category	Number of Postings	Percentage of Total
Non-responding buyers/sellers	20	2.5
Bad bidders	15	1.8
Technical problems	13	1.6
Fraud/deceptions	13	1.6
Payment	12	1.4
Newbies	12	1.4
Photos	11	1.3
Buy it now	11	1.3
Contact eBay	10	1.2
Paid for item, not received	10	1.2
Bid blocking	8	.9
Special items	8	.9
Pinks	7	.9
Relisting	7	.9
Honesty counters	7	.9
PayPal	6	.7
Refunds	6	.7
Shipping	6	.7
Threats	6	.7
Bad sellers	6	.7
Wanted Page	6	.7
Auction cancellation	6	.7
Bid cancellation	5	.6
Returns	5	.6
Spam	5	.6

Category	Number of Postings	Percentage of Total
Listings	5	.6
Feedback	5	.6
Sign-in	4	.5
Lost items	4	.5
Non-paying bidders	4	.5
Finding items	4	.5
Stealing	4	.5
eBay contacts and complaints	4	.5
How-to questions	3	.4
Suspension	3	.4
JFK Assassination	3	.4
Pop-up ads	3	.4
About me page	3	.4
Revising listings	3	.4
Passwords	3	.4
Timelines	3	.4
Free listing days	3	.4
eBay logo	3	.4
Acronyms	2	.3
International sales	2	.3
Sniping	2	.3
Dutch auctions	2	.3
Gallery	2	.3
Fees	2	.3
Shipping supplies	2	.3

Category	Number of Postings	Percentage of Total
Policies	2	.3
Billing	2	.3
Bidding	2	.3
Winning notifications	2	.3
Misrepresentation	2	.3
eBay stores	1	.1
BillPoint	1	.1
Multiple user IDs	1	.1
HTML	1	.1
Earthlink mail problems	1	.1
Leaving negative feedback	1	.1
Paid, no item received	1	.1
Bid size	1	.1
Fakes	1	.1
Not a registered user (NARU)	1	.1
Power sellers	1	.1
Auction assistant software	1	.1
Miscellaneous, not categorized	443	54.6
Total	812	100.0

Mister Lister Help/Discussion Board

According to information on the eBay website, Mister Lister is a bulk listing software application.

The Mister Lister system is composed to two parts: Mister Lister Composer and the online Review Collection Summary page. Mister Lister Composer is a stand-alone application that you install on your computer, and compose Collections of many different items offline. Once a collection has been completed, you send it across the Internet to be processed by the ML servers, and it shows up on your Review Collection Summary page. From the Review page, you can Preview, Edit, and Commit each collection. You can store up to 1000 items for 14 days on the Review page using as many Collections as necessary (Mister Lister Workshop).

Further information discloses that the software consists of timesaving features, including its own dedicated Customer Support.

As might be expected, most postings to this board were aimed at specific issues and problems related to this particular software. Questions were mostly of a technical nature (73.5 percent) regarding problems experienced while using the software. Several specific names were called upon for assistance: Dave and Jerry. Upon further examination of the board, it appeared that Jerry was an eBay employee. A small number of postings arose regarding feedback, Dutch auctions, and using the eBay mail server, but these were extremely limited. A larger group of postings regarding something called SA, SAP, and Sapro show some concerns with this topic. Upon further examination, these topics turned out to be something called Seller's Assistant and Seller's

Assistant Pro. These are also selling tools, similar to Mister Lister.

Photo concerns make up 6.6 percent of the postings; however, most of

the postings were in the category of technical problems and questions,

while the rest were fairly widespread on a variety of topics.

Table 24. Mister Lister Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Technical problems	478	73.5
Photos	43	6.6
Sellers' Assistant	33	5.0
Listing categories	17	2.6
Questions to Jerry	13	2.0
E-mail	10	1.5
Tutorial, workshop, online seminars	9	1.3
Updates	6	.9
Outgoing mail	6	.9
Specific items	5	.7
Honesty counters	5	.7
Buy it Now	4	.6
Which auction software is best	2	.3
Late payments	2	.3
Lost packages	2	.3
Feedback	2	.3

Category	Number of Postings	Percentage of Total
Animations	1	.2
Listing fees	1	.2
Users' personal information access	1	.2
Selling to second highest bidder	1	.2
Private auctions	1	.2
Newbie questions	1	.2
Mature audience category	1	.2
Shipping	1	.2
PayPal vs. BillPoint	1	.2
Payment options	1	.2
Censorship	1	.2
Defective merchandise	1	.2
Lower minimum bid	1	.2
Total	650	100.0

Payment/Billpoint Help/Discussion Board

Community members' postings to this board concern rather specific payment services such as Billpoint, PayPal, and BidPay and the problems users are having with them. A large variety of questions were related to not receiving payment, paying and not receiving the item, and timelines that should be observed for sending/receiving payments. This board overwhelmingly contained postings about Billpoint, which made up 33.1 percent of the total postings.

Table 25. Payment/Billpoint Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Billpoint	197	33.1
PayPal	110	18.5
Credit cards	17	2.9
BidPay	17	2.9
Non-responding buyers and sellers	17	2.9
Money orders	15	2.5
Charge backs	11	1.8
Newbie questions	8	1.3
Paid, didn't receive item	8	1.3
New users' message – how to use Billpoint and PayPal	7	1.2
PayPal vs. Billpoint	6	1.0
Payingfast.com	6	1.0
International PayPal	5	.8
Fraud	5	.8
Payment timeline	5	.8
Buy it now	4	.6
Cash payments	3	.5
How to pay eBay	3	.5
Yahoo pay direct	3	.5
Instant purchases	3	.5
Account exceeds limit	3	.5
Personal checks	2	.3

Category	Number of Postings	Percentage of Total
International Billpoint	1	.2
COD	1	.2
Refusal to pay	1	.2
Billing system	1	.2
How to pay seller	1	.2
Foreign/US delivery	1	.2
International selling	1	.2
Miscellaneous	133	22.4
Total	595	100.0

Packaging and Shipping Help/Discussion Board

Most of the postings to this Help/Discussion Board relate to

shipping tips and techniques, with specific reference to the packaging of

particular types of items, including large furniture pieces, long playing

(LP) records, clothing and other personal items. In addition, size of

packages allowable, shipping charges, and mailing information in terms

of the various United States Postal Service (USPS) classes were issues of

interest. Complaints were also posted; examples of common complaints

include "the buyer charged airmail charges and sent surface mail," "poor

packing, expensive shipping," "shipping overcharges," "inflated charges,"

"slow shipping," and "lost packages." Concerns were expressed on this

board about postal insurance fraud and broken items. Finally, another

big question is "who pays the shipping on returned items...the buyer or

the seller?" High shipping costs, however, was the most frequent posting (13.0 percent), as many community members were concerned about the rising cost of shipping and buyers' complaints about shipping charges. In many cases, the seller charges shipping and handling which contributes to a higher shipping cost; this practice has been closely monitored and questioned very heavily by the buyers on the board.

Table 26. Packaging and Shipping Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
High shipping costs	63	13.0
Packing and shipping special items	38	7.8
How to questions about packaging and shipping	35	7.2
Packages paid for and not received	26	5.4
International	26	5.4
Methods of shipping: USPS, UPS, FedEx	25	5.2
Supplies	20	4.1
Insurance (none), claims	15	3.1
Bad packaging	15	3.1
Newbie questions	9	1.9
Shipping timeline	8	1.7
Large packages	8	1.7
Delivery confirmation	7	1.4

Category	Number of Postings	Percentage of Total
Tutorial	6	1.2
Alternative postage, Pitney Bowes, electronic	5	1.0
Packaging companies	4	.8
Shipping in bags	3	.6
COD	2	.4
Fraud	2	.4
Limited sales	2	.4
Unofficial guide to packaging and shipping	2	.4
Comprehensive shipping information site needed	1	.2
Miscellaneous	163	33.6
Total	485	100.0

Policies/User Agreement Help/Discussion Board

Postings to this board show that in many cases, something has happened to a particular user that he/she did not quite understand. They believed they had probably broken a rule of some sort, but do not know what rule has been broken; consequently, they were requesting assistance from other users to help them understand the situation. Many of the postings refer to non-paying bidders, what can or cannot be said in a listing, and whether links can be made from listing pages. One

user specifically asked if it was permissible to link to the USPS website on the listing page.

Table 27. Policies and User Agreement Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Non-responding buyers/sellers	43	12.6
Website links	21	6.2
Selling policies on specific items	13	3.8
Administrative cancellation	8	2.4
Passing on charges to buyer	8	2.4
Fraud	7	2.1
Deception	7	2.1
Changing terms	6	1.8
Photo stealing	6	1.8
Bid retraction	5	1.5
eBay refunds	5	1.5
eBay storefronts	4	1.2
Pinks	4	1.2
Contacting eBay	4	1.2
Contacting former customers	4	1.2
Selling to second highest bidder	4	1.2
Non-registered buyers and	4	1.2

Category	Number of Postings	Percentage of Total
sellers		
Reserve auctions	4	1.2
Relisting unsold items	3	.9
PayPal links	3	.9
Contact information	3	.9
Bid rigging	3	.9
Powersellers have different rules	3	.9
Suspension	2	.6
But it now	2	.6
Changing user name	2	.6
Obscene e-mail	2	.6
Spam	2	.6
Outbid by seller	2	.6
Bidding with different IDs	2	.6
Fee avoidance	2	.6
Warnings	1	.3
Private feedback	1	.3
Lost money order	1	.3
Wanted board	1	.3
Technical issues	1	.3
About me page	1	.3
Ending auction early	1	.3
Sniper program	1	.3
Questions not forwarded to sellers	1	.3

Category	Number of Postings	Percentage of Total
More postage	1	.3
Miscellaneous	145	42.3
Total	343	100.0

This board also contained complaints about the inability to contact eBay

directly (1.2 percent), and some users asked if there was a phone

number they could use. Deceptive ads were another topic of concern.

One user asked if "redemption" was possible because SPAM had been

sent inadvertently. Many users attempted to understand why eBay

ended their auctions and what rule they had broken to make this take

place. Some users were even using this forum to fight for policy changes,

and of course, there were users who were asking for advice in dealing

with other buyers and sellers. There was some concern with the policing

that takes place on the eBay website, with some reference made to "eBay

Nazis." Overall, 12.6 percent of the total posts on this board are on the

topic of non-responsive buyers and sellers. Non-responsive buyers and

sellers consist of buyers who do not pay for merchandise, sellers who

receive payment and do not send merchandise and both buyers and

sellers who do not respond to attempts to make contact.

International Trading Help/ Discussion Board

The high cost of international shipping is a concern on this

help/discussion board. A great deal of the conversation is about

shipping to Canada and Canadian customs (12.0 percent), followed by

conversation about shipping to and trading with the United Kingdom (5.3 percent). While these two countries are the most frequently mentioned, 13.9 percent of the postings were about shipping to other countries in general, with the omission of Canada and the United Kingdom represented in other categories. Overall, 31.2 percent of the postings were about trading with and shipping to foreign countries and the nuances of trading with specific countries. This large percentage of postings on the topic of trading with a variety of other countries was not unexpected on an International Trading Help/Discussion board.

One question that was asked frequently was "why don't U.S. sellers want to ship overseas or internationally?" Apparently some of the international buyers believed that they were being discriminated against as the question: "why do sellers discriminate against international sales?" was posted. There was also a concern with international bidders who then do not want to pay international postage.

Most of the postings on this board were specific to international trading; however, some common problems with eBay trading were mentioned, such as buyers who bid and do not pay for the merchandise they have won or sellers who receive payment and do not ship the item.

Table 28. International Trading Discussion/Help Board Postings

Category	Number of Postings	Percentage of Total
Specific countries	29	13.9
Canadian trading	25	12.0
PayPal international	13	6.2
United Kingdom Trading	11	5.3
International postage	10	4.8
International selling	10	4.8
International sales discrimination	9	4.3
Payment options	8	3.8
International money orders	8	3.8
International payment	6	2.9
Customs gift declaration	5	2.4
Non-responsive buyers/sellers	5	2.4
Cash payments	4	1.9
E-mail addresses	4	1.9
Fraud	3	1.4
COD	3	1.4
International currency	2	.9
Translation	2	.9
Ship to US Addresses	2	.9
Bid cancellation	2	.9
Auction cancellation	2	.9

Category	Number of Postings	Percentage of Total
Nazi items	2	.9
Customs	1	.5
Sign-in	1	.5
Technical	1	.5
Free international listings	1	.5
Warning	1	.5
Embargoed goods	1	.5
Photos	1	.5
Lost package	1	.5
Lost payment	1	.5
Feedback retaliation	1	.5
International selling workshop	1	.5
Stop payment	1	.5
eBay censorship	1	.5
Unregistered user	1	.5
USPS returned items	1	.5
Miscellaneous	29	13.9
Total	209	100.0

Search Help/ Discussion Board

During the period of the study, the majority of the postings on the

Search help/discussion board concerned the efficacy of search options,

including keyword searching, global site searching, ordering searching,

local searching, searching by bidder, searching by seller, and search

delimiters. Concern about the ability to complete certain types of

searches—searching for "buy-it-now" items only, searching for "hot"

items only, and excluding one or more terms from a search, was

expressed. Some users stated what they were searching for and asked

for assistance. The most popular query on this board, and one that

made up 10.0 percent of the postings, was why items that were recently

listed for sale were not retrieved in a search. These queries were followed

closely by questions about how to search for specific items such as "hot"

items. Another important concern on this board was the frequent break-

down of search functions. The board had very few postings, however,

that consisted of mostly how-to types of queries.

Table 29. Search Help/Discussion Board Postings

Category	Number of Postings	Percentage of Postings
Item not retrieved in search	19	10.0
Special items search	18	9.4
Search functions not working	14	7.3
Adult content	11	5.8
Complete auction search	9	4.7
Wanted board	9	4.7
Search delimiters	5	2.6
Search by seller	5	2.6
Non-responsive	4	2.1

Category	Number of Postings	Percentage of Postings
buyers/sellers		
Buy it now	3	1.6
Fraud	3	1.6
Search for hot items only	2	1.1
Activity history	2	1.1
New today search	2	1.1
Tutorial	2	1.1
Changing e-mail	2	1.1
Ordering search	2	1.1
Page numbers	2	1.1
Filing complaints	1	.5
Special items	1	.5
Sign-in	1	.5
Shill bidding	1	.5
Contact information	1	.5
Shipping containers	1	.5
Fees	1	.5
Photos	1	.5
Local search	1	.5
Message board search	1	.5
Advanced search	1	.5
Items disappeared	1	.5
Block users	1	.5
Keyword search	1	.5
Global site search	1	.5
Alert on bad seller	1	.5

Category	Number of Postings	Percentage of Postings
Technical support	1	.5
Miscellaneous	60	31.4
Total	191	100.0

My eBay Help/Discussion Board

My eBay is a personalized transaction page. By going to this single

page, eBay users can check their eBay account, monitor the progress of

the auctions on which they are bidding and those in which they are

selling, check into their favorite categories, and check feedback. The

questions and concerns expressed on this Help/Discussion Board were

basically how-to in nature.

Table 30. My eBay Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Technical problems	40	27.4
Sign-in	11	7.5
Account cancellation	7	4.8
Auctions I'm watching	6	4.1
About me page	6	4.1
Non-responsive buyers/sellers	5	3.4
E-mail	4	2.7
Items not showing on page	4	2.7
Items disappearing	3	2.1
Deleting items from my	3	2.1

Category	Number of Postings	Percentage of Total
eBay		
Photos	3	2.1
Payment	2	1.3
Contact	1	.7
Relisting	1	.7
Security	1	.7
Policies	1	.7
Search function	1	.7
Miscellaneous	47	32.2
Total	146	100.0

The largest category of concerns was technical in nature (27.4 percent). Questions such as why users cannot get into their My eBay pages, why certain web pages and portions of web pages were not viewable, how to delete items from the web pages, and comments concerning strange-looking pages were common. This low-traffic board had only 146 postings during the four-month time period of data collection. This total was only 1.7 percent of the overall total of help/discussion board postings downloaded for this study.

Registration Help/Discussion Board

Another low-traffic help/discussion board, Registration postings accounted for only 1.6 percent of the overall postings to these help/discussion boards. The most frequently discussed topic on this board was the ramifications of changing one's e-mail address (18.3

percent). Second in popularity was the topic of the credit card

information that is required to be a registered use (9.4 percent).

Table 31. Registration Help/Discussion Board Postings

Category	Number of Postings	Percentage of Total
Changing e-mail addresses	31	18.3
Credit cards	16	9.4
More than one user ID	10	5.9
Canceling account	9	5.3
Changing IDs	8	4.7
Unregistered users	6	3.5
Seller account	6	3.5
Forgotten password or user ID	5	2.9
Cannot register	4	2.4
Bank accounts	4	2.4
Registration errors	3	1.8
Dual registration	3	1.8
Registration	3	1.8
Suspensions	3	1.8
Direct contact to eBay	2	1.2
Incorrect registration information	2	1.2
E-mail problems	2	1.2
Changing company name	2	1.2
Suspension policies	2	1.2

Category	Number of Postings	Percentage of Total
Deleting a name	2	1.2
Watch this item	1	.6
Blocked registration	1	.6
Transfer feedback	1	.6
Photos	1	.6
Board tutorial	1	.6
Invalid ID	1	.6
Where to list	1	.6
Bidding problems	1	.6
Secure/non-secure information	1	.6
Canadian users	1	.6
Finding past seller	1	.6
Miscellaneous	35	20.7
Total	169	100.0

Other topics discussed on this board dealt with canceling accounts (5.3 percent), secure and non-secure information (.6 percent), unregistered users (3.6 percent), transferring feedback (.6 percent), invalid User IDs (.6 percent), and similar matters. There were very few postings on this board that were not related to registration. Twenty and seven-tenths percent of the total postings, though related to registration, were too diverse to categorize.

Escrow/Insurance Help/Discussion Board

The Help/Discussion Board with the lowest traffic of all was the Escrow/Insurance Board, with only 62 postings in the entire 28 days of data collection for the study. Some of the topics of concern discussed on this particular board were non-paying bidders (1.6 percent), fraudulent insurance claims and other fraudulent practices (3.2 percent), bounced checks (3.2 percent), shipping and insurance (3.2 percent), packaging (4.9 percent), insurance paid for but not received (6.5 percent), and the most popular topic of all: escrow (17.7 percent).

Table 32. Escrow/Insurance Help/Discussion Board Postings.

Category	Number of Postings	Percentage of Total
Escrow questions	11	17.7
Fraud	8	12.9
Insurance paid, not received	4	6.5
Buy it Now	3	4.9
USPS/UPS insurance and claims	3	4.9
Problems with no insurance buyer	3	4.9
Packaging	3	4.9
Fraudulent insurance claims	2	3.2
Insurance limits	2	3.2

Category	Number of Postings	Percentage of Total
eBay insurance	2	3.2
Shipping and insurance	2	3.2
Bounced checks	2	3.2
Required insurance	2	3.2
Who pays for insurance	2	3.2
Seller won't give escrow information	2	3.2
Non-paying bidders NPB	1	1.6
e-tradesecure.com	1	1.6
Good standing at eBay	1	1.6
Collectibles insurance agency	1	1.6
PayPal insurance	1	1.6
Insurance claim paid to wrong person	1	1.6
Paid, received no merchandise	1	1.6
Miscellaneous	4	6.5
Total	62	100.0

Even though the various help/discussion boards are supposed to be limited to conversations on the designated topic of the board, a great many topical categories are prevalent across various help/discussion boards. Table 33 details the topics that are discussed on more than two

help/discussion boards and the number of boards on which each topic appeared.

Table 33. Most Frequently Appearing Topics Help/Discussion Boards

Category	Number of Boards N=16	Percentage of Total
Photos	12	75.0
Fraud	12	75.0
Non-responsive buyers/sellers	11	68.8
Buy it now	11	68.8
Payment methods	11	68.8
Technical issues	11	68.8
Feedback	10	62.5
Newbie questions	10	62.5
E-mail	10	62.5
eBay contact	9	56.3
Not a registered user (NARU)	8	50.0
Special items	8	50.0
Shipping	8	50.0
Constant sign-in	7	43.8
Non-paying bidders	6	37.5
Suspensions	6	37.5
Bid or auction cancellation	6	37.5
Paid, no merchandise	6	37.5

Category	Number of Boards N=16	Percentage of Total
received		
Bad buyers	5	31.3
Refunds	5	31.3
Pinks	5	31.3
Harassment	5	31.3
Timelines	5	31.3
Sniping	5	31.3
Misrepresentation	5	31.3
Bad sellers	4	25.0
Shill bidding	4	25.0
Fakes	4	25.0
Scams	3	18.8

The topic of photos, even though it has its own help/discussion board, was discussed on 75 percent (12) of the 16 help/discussion boards, as was the topic of fraud. Though the topic of fraud does not have its own help/discussion board, it would probably be most closely associated with the Trust and Safety Help/Discussion Board where it is the number one topic of discussion. The subject of fraud is also discussed on 11 additional help/discussion boards. While the discussions about photos might be considered technical in nature, photo problems are mentioned so frequently on each of the help/discussion boards that it was given its own category.

The topic of non-responsive buyers and sellers is prevalent across 11 (68.8 percent) of the 16 help/discussion boards, as is discussion of the Buy-it-Now option, various methods of payment, and technical issues. Postings that are specifically attributable to newbies are present on 62.8 percent (10) of the 16 help/discussion boards, showing that new users feel a need to identify themselves as such when asking for assistance.

The frequency of discussion of certain categories on so many help/discussion boards might be construed to show that these are the categories of problems that concern most eBay buyers and sellers. In order to take another look at the frequency of these postings, Table 34 details the number of postings on these particular topics for all of the 16 help/discussion boards combined.

Examination of Table 34 reveals that these frequently appearing topics make up 35.4 percent of the total postings (10,346) to all help/discussion boards. The miscellaneous categories from each board, or those topics that were so varied they were difficult to categorize, made up almost another third (31.2 percent) of the overall total postings (10,346). These two areas combined make up 66.6 percent of the total postings, leaving another one-third to other, less frequently appearing categories of discussion.

Table 34. Frequency of Topical Categories on All Help/Discussion Boards

Category	Total Number of Postings on All Boards	Percentage of Overall Total Board Postings N=10,346
Feedback	691	6.7
Photos	591	5.7
Technical issues	392	3.8
Non-responsive buyers/sellers	228	2.2
Fraud	159	1.5
E-mail	159	1.5
Paid, no merchandise received	127	1.2
Newbie questions	119	1.2
eBay contact	100	1.0
Non-paying bidders	92	.9
Special items	91	.9
Shipping	89	.9
Sniping	81	.8
Payment methods	77	.7
Not a registered user (NARU)	65	.6
Buy it now	64	.6
Bid or auction cancellation	60	.6
Bad sellers	53	.5

Category	Total Number of Postings on All Boards	Percentage of Overall Total Board Postings N=10,346
Refunds	45	.4
Harassment	43	.4
Timelines	43	.4
Constant sign-in	41	.4
Misrepresentation	39	.4
Bad bidders	38	.4
Shill bidding	35	.3
Pinks	34	.3
Fakes	31	.3
Suspensions	29	.3
Scams	29	.3
Free listing day	25	.2
Total		35.4

In a comparison of this list of topics frequently appearing on the help/discussion board, I noted that photos and fraud appear on 12 of the 16 help boards and that photos has the second highest number of postings, with 591 out of the 10,346 overall postings. This places photos second on the list of most frequent postings. The topic of feedback, which places number one on the list of total overall postings with 691, appears on 10 of the help/discussion boards as a discussion topic. The topic of fraud, which also appears on 12 of the 16 help/discussion

boards, places fifth on the list of most frequent postings with only 159

postings out of the 10,346 overall total postings. These results are quite

different from the feedback and photos topics.

A comparison of the data from Tables 33 and 34, however, shows

that the topics of photos, technical issues, non-responding buyers and

sellers, and fraud fall within the top six categories. I might draw the

conclusion, then, from examination of the help/discussion boards, that

these topics are of the highest concern to eBay buyers and sellers.

The eBay Library Web Page and Inside Scoop Area

A link to the library web page at the eBay website is found in the

Community area. The library web page is described as an area where

eBay users can learn more about a category or a collecting area of

interest. Most of the categories listed in the library have a "Front Page"

area that consists of "timely articles about a subject matter" and an

"Inside Scoop" area, described as "a starter guide with all the basic

information you need." (eBay Library). Twelve of the eBay selling

categories are represented in the Library area. The "Pottery" area was

chosen for document analysis as the glass categories are all part of the

larger category: "Pottery, Glass and Porcelain." Even though glass is part

of this overall larger category, the information provided in this area of the

Library is mostly about pottery. While some of the information could

apply to pottery or glass, no information is provided specifically about

glass. In addition, this is one of the Library areas that does not contain

the "Front Page" section. The Library area was not an information source used by many of the interviewees or focus group participants. Only 8 percent (n=25) of the study participants had ever used the Library, and this figure consisted of one interviewee (5 percent, n=20) and one focus group participant (20 percent, n=5).

Each "Inside Scoop" area of the library contains the same basic categories of information: A Brief History, Why People Collect (Item), Starting Your Collection, Major (Item) Categories, Factors Influencing Value, Tips for Finding and Buying, Tips for Listing and Selling, Authentication and Grading, Packing and Shipping, Displaying or Storing, Caring for Your (Item), Insuring Your Collection, Books and Other Sources, and Glossary. These are all areas that could be of interest to both buyers and sellers, and some directly relate to the areas of concern that emerged from the interviews, focus groups, and the help/discussion boards. There is no interaction in the "Inside Scoop" area of the library; the information remains relatively static unless eBay decides to add something to the area. There is an area, however, where the library user can click and enter his or her "thoughts on the current topic."

My analysis of the Inside Scoop area for pottery found that comments about pottery in general can be found, along with some questions regarding pottery. There is also a link to eBay's online forum on pottery, in addition to an offer to talk live on Keen.com. Keen.com is

not an eBay-maintained page, but an outside website that allows people to sign up to be advisers and make money by giving advice over the phone. It also allows people to sign up to receive advice in the topical areas listed. There is not a link here to the online forum on glass, though one does exist. The category-specific chat room for glass was not an area that I chose for document analysis in this study, but at this time it deserves a brief mention. This chat room was not chosen for document analysis because, as is the nature of many chat rooms, there is a lot of off-topic conversation that takes place. The eBay category-specific chat rooms, according to eBay (http://pages.ebay.com/community/chat/index.html), are not for business to be conducted, but for members to share and help each other learn. While observing some of the exchanges in this chat area during the past several months, it is evident that the people using this forum do just that, chat and help each other identify mysterious pieces of glass.

eBay Newsletters

From January 1999 through January 2000, eBay published an online newsletter entitled *eBay Life*. After January 2000, *eBay Life* was replaced with a new newsletter called *eBay Insider*. According to information on the website, *eBay Insider* featured specific categories every month to assist users in trading. Unlike having to seek out the newsletter on the site as users did with *eBay Life*, the free *eBay Insider!* newsletter was distributed by e-mail. I never received this particular

newsletter by e-mail and could not find copies archived on the website, so I could only examine the older newsletter, *eBay Life,* for areas of user concern. Some of the study participants indicated that they had read the *eBay Insider* newsletter. Four interviewees, (20 percent, n=20) and three focus group participants (60 percent, n=5) responded positively to use of the newsletter.

In the 13 months that *eBay Life* was published, four feature sections remained constant: "Letter from the Editors," "It's Happening in (Current Month)", "About Me," and "Uncle Griff and Aunt Flossie." Other feature sections found in these issues are: "Getting to Know Us," "Safe Harbor," "Seller Tips," "Greatest eBay Find," and "Has eBay Changed Your Life?" Periodically, additional feature sections appeared during the 13 months of publication, many of them seasonal, such as Valentine Cards, History of Valentines, Preparing for Taxes, Collecting Irish Items, Passover and Easter, Halloween Collectibles, Thanksgiving, and Celebrating the Holidays. Over the life of this publication, various changes were made and a number of features were dropped or added.

Letter from the editors. The monthly Letter from the Editors section is simply an introduction to the contents of the newsletter that gives the editors an opportunity to point out and describe the various items the reader will find in that particular issue of *eBay Life.* Obviously, if the editor is pointing something out in the newsletter, he or she must believe it is important for the readers to know about this topic. What I find to be

extremely interesting and functional about this particular feature section is that specific words in the "letter" are links. For example, the editor discussed wedding cake toppers and vintage wedding gowns because "April is the month June brides and grooms begin finalizing their 'to do' lists." Actually, these little vignettes functioned as an advertisement for that particular type of merchandise sold by eBay online auction sellers, as the links in the text actually lead to that selling category on the eBay website, and narrow it down by searching for wedding cake toppers which appear in the "Home and Garden" selling category. Each monthly newsletter has a seasonal theme on which the editors capitalize. The April 1999 issue also mentions spring gardening and planting and capitalizes on that topic.

It's happening in (current month). The information provided in this feature section consisted of interesting, sometimes little-known, tidbits such as movie star birth dates, holidays occurring in that particular month, and other strange but notable dates such as "National Professional Pet Sitters Week" or "Yo-Yo Days." The December 1999 issue states that December 1-7 is Cookie Cutter Week and proceeds to discuss various cookie cutter shapes and tools, which are linked to the category where these kinds of items are selling on the eBay auction. This section was used, as was the "Letter from the Editors" section, as a place to provide interesting, timely, and seasonal tidbits of information that could also be linked to items selling on the eBay auction. The newsletter

provided a unique way to highlight different selling areas on eBay and to demonstrate that just about anything you might be interested in purchasing is probably for sale on eBay. It also shows the sellers which items are being highlighted that month, so they can list items for sale in that category, knowing that a link had been made from the newsletter, thus giving them some additional advertising.

Has eBay changed your life? This feature section contains very interesting stories about how people became involved with selling on eBay. These stories make very compelling reading and tie in with one of the questions I asked the focus group and interview participants in my study, which was when and how they found out about online auctions. The stories found in this section are all success stories of one kind or another, some on a larger scale than others. After reading these stories, it would be easy for individuals to become encouraged by the success others have experienced by buying and selling on the eBay auction. For example, the July 1999 issue contained three success stories. The first story was about an auctioneer and antique dealer who was planning to reduce his expenses by closing his 12,000 square foot building and selling full time on eBay. The second story was about a gentleman whose $8,000 worth of business tools was lost when the house he was working on burned to the ground. The family was able to supplement its income and survive financially by selling more frequently on eBay. The third story involved a woman whose eBay auction activities led her to a

new collecting hobby, which she believes has enriched her life immensely. This section, as the others, provides links to particular selling areas of eBay. For example, in the story about the lost tools, the words "tools" and "hammer" are links to the tools selling category found in the Home and Garden category on the eBay auction.

Uncle Griff and Aunt Flossie. Probably designed to provide a little "homey" atmosphere for the eBay newsletter, this feature section could provide some clues to problems and concerns of eBay buyers and sellers if I were certain these questions were actually submitted by real eBay buyers and sellers. This newsletter section is preceded by the disclaimer: "The following information is provided to educate and inform. eBay™ is not liable or responsible for any type of damage or loss caused, or alleged to be caused, directly or indirectly, by the information below (Uncle Griff and Aunt Flossie section, 1999, January, ¶1)."

While some of the questions asked appeared to be valid with very good answers, some of them appeared to be provided as a little humorous release as they consisted of extremely tongue-in-cheek responses to alleged letters from buyers or sellers. For example: "Dear Aunt Flossie, I collect circus clowns, but my wife says I have so many that I am starting to look like a few of them. Now, I think my clowns are very cute, so I am taking this as a compliment. But I don't think she meant it that way. What should I do? -- Clowning Around (Uncle Griff and Aunt Flossie section, 1999, February, ¶26)." It is extremely difficult

to believe that an eBay user made this query; consequently, I'm not sure whether I can believe that any of the questions were actually submitted by real eBay users. While this section is very humorous and might serve the purpose of entertainment for the readers, I find that it could be of little value to determining actual problems and concerns of the online auction entrepreneurs in the present research study.

Getting to know us. This was another valuable feature section of the online newsletter probably geared toward the goal of creating a sense of community on eBay. This section consisted of introductory types of biographical information on eBay employees, which could give users the feeling that they "know" some of the employees, thus contributing to an overall sense of community. In this section, as in others, any word used that was something sold on eBay was linked to that particular selling category.

Greatest eBay find. This feature section consisted of rather touching stories of how people have found very special items on eBay. The stories behind these searches for a particular item were extremely interesting to read. Not only did people find special items they had been searching for over a long period of time, but one person even found a friend who had been out of touch for years. Again, this is another feature section probably created to enhance the sense of community at eBay, but also to serve as a marketing tool to let readers know that eBay is a great place to satisfy nostalgia.

About me showcase. The About Me Showcase is another section that contributes to eBay community building. It consists of links to "About Me" webpages constructed by various eBay users that have been nominated by other eBay users as unique. The About Me pages allow eBay users to "introduce" themselves to other members of the community with photos and other personal information. Additional information found on these "About Me" pages are links to current auctions the person has in progress and recent feedback. Several pages examined detailed how the person became interested in eBay. While these particular pages do not provide insight into the problems and concerns of the subject eBay users, they do provide insight tino the person and possibly the route they followed to eBay involvement.

Miscellaneous feature sections. Many of the sections that appeared sporadically in only a few issues were seasonal items. While not a seasonal topic, "Safe Harbor" was a feature section that appeared in three issues of *eBay Life* and was one of the most informational as far as providing guidance to selling on eBay. However, it was still not indicative of anything considered problematic by eBay sellers. "Seller Tips," a feature that appeared in the very first issue of *eBay Life* in January, 1999, had the potential to be the best source of information for this research study, but unfortunately it only appeared it the one issue. "Seller Tips" consisted of advice for successful eBay selling from other eBay sellers. This section could have provided information very similar

to that gleaned from the study question regarding advice to people considering online selling. One seller stated: "The most powerful tip is that good customer service isn't good enough. It needs to be excellent." Another tip was the recommendation to start the bidding for an item at the least amount the seller would be willing to take for the item with no reserve. This "will get you more bids or higher bids." (*eBay Life*, 1999, January). Another tip was:

> make sure that any picture file that you use is small enough so that it doesn't take 2 minutes to load when potential bidders bring up your auctions. People will not wait and you could lose a sale. Make sure the description you provide is exact. People do not like surprises. If an item is supposed to be mint, it better be, since the use of the feedback system can destroy any trust that people will have when dealing with you...(*eBay Life*, 1999, January).

Another seller claimed the keys to success were providing fast shipments, sending email responses to everybody, providing good value for the dollar, and being consistent. Another tip was to be careful when dealing with sellers who have a feedback rating of less than 100 or sellers who have negative feedback.

<div align="center">Problem Dimensions</div>

Finally, Taylor (1991) is concerned with problem dimensions, which he describes as "a more formal set of characteristics each of which illuminates the criteria for judging relevance of response" (p. 225).

MacMullin and Taylor (1984) came up with 11 problem dimensions of which Taylor (1991) believes the most significant to be well structured/ill structured, complex/simple, assumptions agreed upon/not agreed upon, and familiar/new patterns. The well-structured problems tend to require hard data to be solved, while the ill structured problems normally require information that dictates how to proceed. Complex problems can have many variables with confusion as to how they interact with other variables. People need to "be on the same page," so mutual understandings of assumptions that reflect world perceptions or simply perceptions relating to specific problems are other dimensions to be considered. The last of the dimensions delineated by Taylor related to the fact that "many problems are essentially procedural and rely on well-established method and techniques built up over centuries of practice. When this is not the case, trial and error becomes standard procedure" (p. 226). While Taylor admits that these dimensions have not been validated experimentally, they do appear to have an effect on the kind of information that is deemed useful. An examination of the problems and concerns online auction sellers revealed through the online interviews and focus groups and through document analysis shows an abundance of problems at the procedural level. Taylor (1991) describes problems of this dimension as those relying on well-established method.

Resolution of Problems

Taylor (1991) presents a large variety of questions to be answered regarding the information use environment and the resolution of problems.

What constitutes, for a given set of people, resolution of a typical problem?

What kinds of information (amount, degree of relevance, quality, format, etc.) do people in a particular set anticipate?

What filtering mechanisms exist?

What are the attitudes towards the benefits and costs of information use?

What are the criteria of information choice?

What does information do for people in specific settings? (p. 228)

The general attitude that the more information people have, the better off they are, leads to information overload. Decision makers are in a better position, however, if they have information that might not be needed rather than to be without information that might be needed. For that reason, we tend to overload ourselves with information, developing methods for deflecting unwanted information along the way (Taylor, 1991).

In the examination of a given information use environment, it is essential to study how the particular set of people view their problems and what they consider to be a satisfactory resolution to those problems.

Most business decision makers are accustomed to acting on much less than total information, meaning that they satisfice. According to Herbert Simon (1976), satisficing means that they search for the course of action that will be satisfactory, or good enough. This act of satisficing then becomes apparent in their information behavior. Taylor (1991) further states that problems are rarely solved with a single question and answer but "pose different requirements on the type of information perceived as necessary, and hence different uses to which information is put in the process of resolution" (p. 229). Questions were posed in the online focus groups (Appendix H) and the online interviews (Appendix I) in an attempt to determine just how the study participants resolved the problems they encountered while working in the online auction environment at eBay. These questions were tied to the "problem" questions such as "How do you find the information to overcome these problems?" and were asked with regard to the same experience levels as the problems questions. In other words, how did the participants find resolutions to the problems encountered when they first decided to get involved in the online auction, when they actually began selling online, and after they had a bit of experience with online auction selling. The responses to these questions are tabulated and reported in Tables 35-38.

Initial Problem Resolution

In response to a question related to problems encountered when first deciding to become involved in online selling and how these

problems were overcome, the study participants cited a variety of problems and problem-solving approaches. The types of problems experienced were discussed in a previous section of this paper. The problem-solving approaches or problem resolution in Taylor's (1991) terms will be discussed here. Twenty-eight interviewees (93 percent, n=30) and 11 focus group participants (100 percent, n=11) responded to this question. The methods of problem resolution cited in Table 35 include sellers who used multiple methods of problem resolution; therefore, the table details how many times each method was mentioned.

Table 35. Initial Methods of Problem Resolution

Method	Overall n=39		Interviews n=28		Focus Groups n=11	
	Number	Percent	Number	Percent	Number	Percent
Trial and error	9	23.1	5	17.9	4	36.4
Family, friends, or co-workers	4	10.3	3	10.7	1	9.1
Other eBaysians	3	7.7	3	10.7	0	0
Previous experience	5	12.8	3	10.7	2	18.2
eBay website or technical support	6	15.3	3	10.7	3	27.3
Books, magazines, and other print materials	3	7.7	3	10.7	0	0
Computer specialist	1	2.6	1	3.6	0	0

Method	Overall n=39		Interviews n=28		Focus Groups n=11	
	Number	Percent	Number	Percent	Number	Percent
Internet provider technical support	1	2.6	1	3.6	0	0
No method cited	11	28.2	6	21.4	5	45.5
No problems	3	7.7	3	10.7	0	0

Trial and error was listed as a problem resolution method by more than 20 percent of the study participants, while 10.3 percent noted that they received assistance from family, friends, or co-workers to solve problems. "I spent a lot of time calling my family for help, & being frustrated to the point of tears, many times in the beginning," was one participant's response. Another participant, whose only real problem with online selling was becoming computer literate, said that fortunately her techno-son was able to help her out a lot. Another 15.3 percent of the participants resolved their problems through the eBay website or through eBay technical support, while 7.7 percent used books, magazines, or other print materials to solve their problems. Overall, 28.2 percent (n=39) of the study participants who responded to this question did not cite a particular method of solving the problems they encountered when they first decided to sell online. A larger percentage of focus group participants, 45.5 percent (n=11) than interviewees, 21.4 percent (n=28) did not cite specific problem resolution methods.

Although these respondents cited no particular method of problem solving, the description of problems led me to believe that they relied on their own instincts to solve these problems. Trial and error was probably the method used, even though this exact wording was used by only 23.1 percent of the study respondents. Some assistance was gained through the eBay website, as 15.3 percent of the study participants stated they had solved their problems through information on the eBay website, links to helpful information from the eBay website, or eBay technical support: "eBay's information made it simple." Several people mentioned that they read online materials or found training on the Internet. Some sellers utilized other sellers and buyers as sources for problem solving (7.7 percent, n=39): "I contacted people I had purchased from and asked for advice," and "followed instructions dictated by the auction company." One study participant "began by gathering information about online selling," while yet another stated that "experience is needed to get beyond" the problems experienced. While not a large percentage, 12.8 percent of the study participants who responded to this question stated that their previous experience had prepared them for the problems they encountered, and one seller stated: "After 20 years of retail, the problems of on-line selling are the same as at a Bricks and Mortar. I just have experience with those problems...". Another seller disclosed "I really didn't have too much problem getting started...I had previous experience

on computers, and with writing, and with old stuff—so this whole gig came very naturally to me. Truly a blessing."

New Seller Problem Resolution

In response to a question related to what they needed to know as beginning online auction sellers and how they found the information, the study participants again cited a variety of problems and problem-solving approaches. Of the 41 overall study participants, 34 (82.9 percent) responded to this question. Twenty-six percent of these respondents (n=34) were focus group participants and 73.5 percent (n=34) were interviewees.

Many of the problems did not change substantially from when the participants first decided to get involved in online selling to when they had some experience, but were still relatively new sellers. The methods of problem resolution, however, did change somewhat. These new sellers with some experience began using family, friends, and co-workers as information sources for problem resolution, in addition to finding solutions on the eBay website or from eBay technical support. The number of people who cited trial and error as a major method of problem solving remained relatively stable across the two groups, differing by only 2.5 percent of respondents who answered this question.

Table 36. New Seller Methods of Problem Resolution

Method	Overall n=34		Interviews n=25		Focus Groups n=9	
	Number	Percent	Number	Percent	Number	Percent
Trial and error	7	20.6	5	20.0	2	22.2
Family, friends, or co-workers	8	23.5	3	12.0	5	55.6
Other eBaysians	3	8.8	1	4.0	2	22.2
Previous experience	1	2.9	1	4.0	0	0
eBay website or technical support	11	32.4	7	28.0	4	44.4
Books, magazines, and other print materials	4	11.8	2	8.0	2	22.2
Expert	1	2.9	1	4.0	0	0
Internet provider technical support	2	5.9	2	8.0	0	0
No method cited	5	14.7	4	16.0	1	11.1
No problems	0	0	0	0	0	0

Those sellers who solved their problems through the eBay website or eBay technical assistance (32.4 percent) had good things to say about eBay support and believed that eBay has made selling relatively easy: "Almost all of my questions were answered by eBay," was one response

and another respondent stated: "I went through all the sites on eBay and studied them carefully, then I asked questions, it is fairly simple. eBay is a great place to buy and sell, they are very informative." Another respondent also stated that "eBay has done a good job at explaining what to do when you want to buy or sell. They have made it simple."

While the number of respondents who solved their problems with the assistance of other eBaysians was small, (3, 8.8 percent) what one of the respondents had to say about this assistance was very revealing of the sense of community on eBay: "I find that the best place to go for help is to other eBayers. If I need to know something all I have to do is mention it in my description or email a buyer. It is like a fraternity and it is powerful."

Another small group of the new sellers (4, 11.8 percent) resolve their problems through research using books, magazines, and other print materials. One seller submitted a list of problem resolution sources: "did research, research, and more research, used personal library, used the library, periodicals...any source at all." Still another seller used quite a few sources: "help from friends, magazine articles, family, information on eBay, customers, general public," yet stated "books don't work well." "A lot of research and practice, practice, practice," was one seller's problem resolution process, and another seller stated that she spent "not less than six hours per week researching," mostly in reference books. One

respondent, a journalist and former auctioneer, stated that so far he has not found anything he cannot resolve with research.

Experienced Sellers and Problem Resolution

The study participants were asked if they still had problems and concerns now that they were experienced eBay sellers, and, if so, how they resolved these problems. Almost all participants responded to this question (73.1 percent, n=41).

Table 37. Experienced Seller Methods of Problem Resolution

Method	Overall n=39		Interviews n=30		Focus Groups n=9	
	Number	Percent	Number	Percent	Number	Percent
Trial and error	8	20.5	5	16.6	3	33.3
Family, friends, or co-workers	2	5.1	2	6.7	0	0
Other eBaysians	3	7.7	3	10.0	0	0
Previous experience	1	2.6	0	0	1	11.1
eBay website or technical support	9	23.0	5	16.7	4	44.4
Books, magazines, and other print materials	4	10.3	4	13.3	0	0
Expert	1	2.6	0	0	1	11.1

Method	Overall n=39		Interviews n=30		Focus Groups n=9	
	Number	Percent	Number	Percent	Number	Percent
Internet provider technical support	0	0	0	0	0	0
No method cited	8	20.5	7	23.3	1	11.1
No problems	6	15.4	4	13.3	2	22.2

Trial and error as a method of problem resolution accounted for 20.5 percent (n=39) of the responses from study participants, while 23.0 percent (n=39) of the participants used the eBay website or eBay technical support to solve their problems. Again, those who used the eBay website had positive comments such as: "eBay help site is very good at answering many questions. If they do not address a certain question you can e-mail them directly."

Answers dealing with self-reliance and research were cited by 10.3 of the study participants. Comments such as: "Just putter through until it works for me," or "purchased lots of reference materials," are representative of the comments in this category. One comment that I found to be especially interesting in this category was from a participant who used the Internet to put a value on the items she sold, "...but sometimes I have to use the library."

Finally, 7.7 percent of the sellers secure their problem resolution through eBay peripherally, as one seller stated: "Just about everything

you want to know you can find out from other eBayers. They are like a clan and very helpful to each other," while yet another seller "...spent a great deal of time in one of the online chat rooms this weekend trying to resolve image hosting problem. When I figured out how to word the question, the answer was very quick and simple."

One participant who used a variety of methods to solve problems stated: "I don't know where to find help. I just bungle along, use what I know how to use, ask for help from knowledgeable people and just ignore what I can't figure out. Bad system, but that's how it is at my house."

Taylor (1991) asserts that the passage of time and increased specialization turns what were once complex tasks into routine processes, reducing the effect of new information; consequently, as online auction entrepreneurs gain experience, exposure to the increasing amount of information on the eBay website may have very little effect on their day-to-day activities. This parallels Kuhlthau's (1997a) discovery that familiarity and proficiency in a particular job alter the information-seeking and use process in her 1997 study of a securities analyst. Kaish and Gilad (1991) also made a similar discovery in that after gaining experience, entrepreneurs seem to place more trust in themselves and rely less on input from others. Table 38 compares the reliance of the study participants on particular sources of information at various stages of experience. While the data for each experience level was discussed in

depth in earlier in this chapter, Table 38 allows the data for each level to be viewed side by side and compared.

Table 38. Comparison of Problem Resolution Methods between Inexperienced and Experienced Entrepreneurs.

Method	Initial Consideration n=39		New Sellers n=34		Experienced Sellers n=39	
	Number	Percent	Number	Percent	Number	Percent
Trial and error	9	23.1	7	20.6	8	20.5
Family, friends, or co-workers	4	10.3	8	23.5	2	5.1
Other eBaysians	3	7.7	3	8.8	3	7.7
Previous experience	5	12.8	1	2.9	1	2.6
eBay website or technical support	6	15.3	11	32.4	9	23.0
Books, magazines, and other print materials	3	7.7	4	11.8	4	10.3
Specialist	1	2.6	1	2.9	1	2.6
Internet provider technical support	1	2.6	2	5.9	0	0
No method cited	11	28.2	5	14.7	8	20.5
No problems	3	7.7	0	0	6	15.4
Total Responses*	46		40		43	

*The number of total responses in many cases is larger than the number of participants responding to the question because many participants

used more than one method of problem solving. Consequently this number reflects the number of times a particular method was mentioned.

Reliance on trial and error remained fairly steady across all experience levels, with approximately 20 percent of the study participants utilizing this as a problem-solving method. Similarly, dependence upon the assistance of other eBaysians stayed fairly constant, with approximately 8 percent of the study participants utilizing this source. While family, friends, or co-workers figured prominently as sources for new sellers (23.5 percent), they did not rate as highly when the study participants were in the process of considering online selling (10.3 percent), and they were of little importance to experienced sellers (5.1 percent).

More study participants (12.8 percent) considered that their previous experience provided them with enough information to sell online at the initial consideration level than at the new seller (2.9 percent) or experienced seller (2.6 percent) level. Previous experience mentioned by these participants was acquired through training or through previous work experience. Use of the eBay website and eBay technical support for problem solving grew from 15.3 percent at the initial consideration level to 32.4 percent at the new seller level, finally dropping to the 23.0 percent level for experienced sellers.

The use of various specialists such as computer specialists, software specialists or photography specialists was extremely limited

across all three levels of experience, as was the use of the Internet service provider's technical support as a method of problem solving.

Utilization of books, magazines, and other print materials, which also includes the use of libraries and bookstores, was limited for those initially considering online selling (7.7 percent) and rose for new sellers (11.8,) while slightly losing popularity for experienced sellers (10.3 percent).

A high percentage (28.2 percent) of the study participants at the level of initial consideration described the kinds of problems and concerns they had, but did not say how they managed to solve these problems. A smaller percentage (14.7 percent) of the study participants responding to the question as new sellers did not cite their methods of problem resolution, while 20.5 percent of the experienced sellers did not cite methods of problem resolution. Some the participants even admitted that there really was not any information available to help them solve the problems they had experienced.

Finally, some of the study participants stated that they had no problems at all. At the initial decision level, 7.7 percent of the participants said they had no problems. At the new seller level, however, none of the participants said they did not have problems. At the experienced seller level, 15.4 percent of the participants said they had no problems to solve. This supports Kuhlthau's (1997a) findings that familiarity and proficiency in a particular job alter the information-

seeking and use process and Kaish and Gilad's (1991) discovery that entrepreneurs rely less on input from others after they gain some experience.

The data from Tables 13, 14, 15, and 38 have been placed into Table 39 to allow a comparison of the problem topics that frequently appeared in interviews, focus groups, and on the help/discussion boards. The help/discussion boards were chosen for this analysis because overall, of the three areas of the eBay website chosen for document analysis, the help/discussion boards provided the most insight into the problems and concerns, not only of the eBay sellers, but also of eBay buyers. The areas of problems and concerns that emerged in these boards will be compared with the results of the online focus groups and interviews to determine if there is a correlation. It is important to note, however, that these help/discussion boards do not simply function as static question and answer boards. The very fact that many of the same topics, unrelated to the title of the particular help/discussion board, appear throughout all of these boards shows us that people use these as a vehicle to talk about whatever is on their minds at that time. Even though a topic is unrelated to a particular board, they may go to that board because they believe they will be able to strike up a conversation more easily on one board than on another. eBay management has always described itself as a community and participants certainly exhibit behaviors that substantiate this. It is not

simply shop talk that we find on the discussion boards, such as the recent discussion on the impact of the new postal regulations on shipping items sold vis-a-vis the anthrax scare, but also social support. For example, a recent thread asked others to share their pet peeves, while still another listed "stupid questions asked by buyers" that provided a sort of comic relief. This would be the sort of conversation that takes place frequently in a work environment. It was also interesting, however, that buyers also have access to these boards. These help/discussion boards also provide a place for eBay users to vent their frustrations. The titles for many postings are input in all capital letters, which simulates shouting online; for example, approximately 10 percent of the postings to the Technical Issues Help/Discussion board were in all capital letters. Others vent their frustration by making comments such as "I AM GOING INSANE!" Still another board user combined a semi-business question and a personal question in a help/discussion board posting: "#1- Can anyone please tell me how to remove crayon marks off of solid bare wood? and #2- if i give my computer to my 13 year old daughter and get a new one, is it possible for us both to be online or would I have to get a second phone line? Thank you all for always being here for me!" These are the same types of conversations that might take place in the employee lounge or around the water cooler or copy machine. In this case, however, eBay has

created the virtual employee lounge, the virtual water cooler, and the virtual copy machine.

Table 39.   Top Categories of Problems of Study Participants and Top Categories of Problems from Help/Discussion Boards

Study Participants			Help/Discussion Boards
Initial	New	Experienced	
Photos/HTML	Photos/HTML	Non-paying bidders	Feedback
Non-paying bidders	How to use eBay	Finding items to sell	Photos
Computer literacy	Merchandise knowledge and value	Merchandise knowledge and value	Technical issues
Packaging and shipping	Computer literacy	Record/book keeping	Non-responding bidders
Customer service	Ad/listing writing	Customer service	Fraud
Ad/listing writing	Customer service	Ad/listing writing	E-mail
Payments	Technical knowledge	Website changes	Paid, no merchandise received

In an analysis of the data presented in Table 39, one must again remember that the data from the help/discussion boards comes from both buyers and sellers, while the data from the study participants is

strictly from the sellers who participated in the online interviews and online focus groups. The topic of photos ranks number one as an initial problem and a problem for new sellers but does not appear high on the list of topics mentioned by experienced sellers, which could show us that the experienced sellers had conquered this problem. The topic of photos also ranks second highest as a topic of discussion across all 16 discussion boards, showing that it is frequently discussed on many discussion boards. Actually, the topic of photos is discussed on 12 of the 16 discussion boards during the period of this study.

Computer literacy ranks in the top categories mentioned by those considering online selling initially and new sellers alike. While this particular topic is not detailed on the help/discussion boards, it is likely that it could fall into the technical issues category which ranks third of most discussed topics on the 16 help/discussion boards. In addition to be discussed frequently across all of these boards, technical issues are discussed on 11 of the 16 help/discussion boards.

Experienced sellers are most concerned with non-paying bidders, while this topic ranks fourth in frequency of discussion across all 16 of the discussion boards. Non-responding and non-paying bidders were similar topics and were combined for Table 39. The topic of feedback is discussed most frequently across all 16 of the help/discussion boards, appearing on 10 of the 16 boards. One of the biggest concerns of buyers and sellers alike regarding feedback is underserved retaliatory feedback.

Non-responding and non-paying bidders who receive bad feedback from a seller, for example, can retaliate by leaving bad feedback for the seller for no reason at all.

An analysis of the problems of study participants and of the users of the help/discussion boards presented in Table 39 show photos, computer literacy, and technical issues as high-ranking problems. Solutions to these types of problems are what I consider to fall in Taylor's (1991) instrumental classification, which I term "how to" problems because one needs to find out what to do or how to do something. Instructions are needed in the instrumental classifications. In Taylor's discussion of problem dimensions, he mentions the familiar/new patterns dimension, which seems to fit well here. He states "many problems are essentially procedural and rely on well-established method and techniques built up over centuries of practice. When this is not the case, trial and error become standard procedure (p. 226)." Because all of this technology is so new, and so new to many of the people attempting to sell online, well-established methods and techniques have not been built up. Taylor's statement that trial and error becomes standard procedure is supported by the data from this study since over 20 percent of those considering online selling, new online auction sellers, and experienced auction sellers cited trial and error as a major method of problem solving (Table 38).

Because Photos and HTML is the number one area of concern for the interviewees and focus group participants and scores as the sixth highest item of concern in the Help/Discussion Boards, I decided to take a tour around the eBay website to ascertain just what kind of assistance is offered for users having problems with photos. First of all, there is the Help/Discussion Board for Photos and HTML; there is also an Images/HTML Board listed in the General Chat Rooms area. There are photo and image questions listed here, and I observed that many of these questions are answered by other users. The questions in this chat board are interspersed with the general types of superficial chat room "chatter" types of comments; however, help is available and it is obvious that users are getting some assistance here.

In the Education area of the website, located by clicking the Help button that appears on every eBay web page, there is a tutorial listed as an "Interactive Tutorial," entitled "Selling on eBay." The description of this tutorial is:

Learn how to add photos to your listings through eBay Picture Services and how to use basic HTML code to spruce up your Item Pages. Our interactive HTML tutor even lets you practice and learn online. Also, learn how to accept credit card payments for your sales on eBay (eBay Tutorials).

This is not a very detailed tutorial, especially in the way of the photo assistance, but it does have an interactive area where one can

practice using HTML tags and actually see how they will look on an eBay listing page. HTML difficulties, however, were noted as problems by only two study participants, while the rest of the problems in this category were photo related. From the way the study participants voiced their photo concerns, it appears that they need much more detailed assistance than what is offered here.

How the Data Answered the Research Questions

Research Question 1

What is the experience of online entrepreneurship as it is understood by those who engage in online business activity? It is evident from the data that the online auction entrepreneurs viewed this experience as a sum of various activities (Table 10) rather than as a specific job title such as salesperson, accountant, or secretary. Overall, the activities that made up the experience of online auction entrepreneurship for the participants in this study included:

- Find items to sell

- Create photographs

- Conduct research

- Write advertisement or listing

- Handle correspondence

- Pack and ship items

Research Question 2

What do participants say about the role(s) of information in entrepreneurial activity and decision-making? According to Paisley (1980) an information task, such as decision-making, occurs in sequences, which in the case of decision-making includes "searching for information, selection and processing relevant information, comparing alternative decisions with respect to their probable outcomes, and making the decision" (p. 119). Because of the nature of the interview questions asked, the beliefs of the study participants regarding information needs were evidenced in the problems experienced as beginning online auction entrepreneurs and as experienced online auction entrepreneurs (Tables 13, 14, and 15) and the sources they chose to use to solve these problems (Tables 12, 35, 36, 37, 38, 39 and 40). The role of information in decision-making was not discussed by the informants in this study, who were concerned with its importance to working and surviving in this particular environment.

Research Question 3

What information sources and resources have online entrepreneurs found the most useful and how has that information been used—in other words, where do online entrepreneurs go for their information? First of all, many of the study participants concentrated on describing the types of problems they experienced, but they did not indicate where and how they found the information to solve these

problems. However, the data showed that slightly less than one-third (29.9 percent) of online auction entrepreneurs in the study preferred to get their problem-solving information from other people, in the form of friends, family, co-workers, as well as from customer support available from Internet Service Providers (ISP) and from computer manufacturers. The eBay website and eBay technical support were important sources of assistance for study informants at the new seller level (32.4 percent) and the experienced seller level (23.0 percent).

Overall, self-reliance was the most reported method of problem solving (32.0 percent) followed closely by a preference for real person sources (29.9 percent). The preferences for face-to-face sources exhibited through the responses of the study participants are in line with the findings in the literature that entrepreneurs and small business managers prefer to use personal sources of information (Specht, 1987; Smeltzer, Fann, & Nikolaisen, 1988; Schafer, 1990; Brush, 1992;), described in the literature as family and friends. Studies show that small business entrepreneurs seem to prefer these sources described as face-to-face (Young & Welsch,1983; Yeoh, 2000); while Daft and Weick's (1984) study observed the preference for personal information sources in highly complex environments. Other studies show that managers prefer oral communication as a means of transferring information (Achleitner & Grover, 1988; Yeoh, 2000). Nelson's (1987) findings rank the information source preferences of female entrepreneurs. In Nelson's study the two

sources of information that ranked highest in terms of usefulness, usage, and cost were networking and significant other, followed by the expert professional sources of accountant and business or professional organizations.

Research Question 4

What formats of information have online entrepreneurs found the most helpful and why? This question was asked to determine the participants' media use and preferences for certain formats of information for problem solving as mentioned in Taylor's (1991) model. Table 40 details the information formats preferred by the study participants for their problem-solving activities.

Table 40. Preferred Types of Sources for Problem Resolution

Method	Initial Consideration Stage		New Seller Stage		Experienced Seller Stage	
	Number	Percent	Number	Percent	Number	Percent
Real person sources	9	28.1	13	36.1	7	24.1
eBay website or eBay technical support	6	18.8	11	30.6	9	31.0
Books, magazines, and other print materials	3	9.4	4	11.1	4	13.8

Method	Initial Consideration Stage		New Seller Stage		Experienced Seller Stage	
	Number	Percent	Number	Percent	Number	Percent
Trial and error or previous experience	14	43.7	8	22.2	9	31.1
Total responses	32	100.0	36	100.0	29	100.0

Use of the eBay website or eBay technical support as a source of problem-solving information was cited by 26.8 percent of the study participants overall.   While most of the participants indicated that this problem-solving method was successful for them, contacting eBay customer support directly was extremely difficult to accomplish. Consequently, even though contacting eBay directly was a preferred method for solving problems, participant comments also showed that it could be extremely difficult to contact eBay. One participant lamented that she would "keep contacting eBay, read the online help information and cry a lot." Yet another participant stated "eBay is wonderful at helping solve problems as is Gateway," so it appears as though there is a discrepancy in the way eBay users experience online assistance. Assistance from eBay was much more important at the new seller level, 30.6 percent, and the experienced seller level, 31.1 percent, than it was at the initial consideration level, 18.8 percent. The reason for this difference may be that at the initial consideration level, the study participants were not considering concrete methods of problem solving,

while this became something sought out as participants gained more and more experience.

The use of books, magazines, periodicals, and other print materials, which also included going to a library or bookstore, only accounted for 11.3 percent of the responses to problem-solving methods. There was not a great difference among the three classes of sellers, but the percentage rose from 9.4 percent at the initial seller consideration level to 11.1 percent at the new seller level to finally 13.8 percent at the experienced seller level. This rise in usage could be due to the fact that with experience resulting in increased selling, the participants began to use reference books for glass identification and valuing.

Research Question 5

What kinds of problems, if any, have online entrepreneurs encountered in retrieving the information they have found helpful and useful? Study participants specifically indicated no problems retrieving information from any of the preferred sources of information listed in except for making personal contact with eBay personnel. Responses to interview and focus group questions and a great deal of the conversation on the Help/Discussion Boards, however, revolved around not being able to find answers to questions and help with problems on the eBay website or the inability to get answers to specific questions from eBay personnel. While some study participants stated that eBay "has a pretty fine tuned program for the most part," "eBay has links to basic tutorials," "eBay is

wonderful at helping solve problems," "eBay's information made it simple," and "eBay gives the information, I just need to follow through," other participants made comments such as "my issues are with eBay— they are only after money since they went public and are of very little help when you have problems," and "eBay rules protect buyers but leave sellers in a hopeless position regarding feedback and collection." There was obviously a discrepancy in the ways that users experienced eBay information and eBay assistance. These varied experiences might be due to a lack of online experience which was evident in the statements made by participants indicating their computer illiteracy, or simply a difference in styles of information processing that plagues those who cannot get the kind of "personal" one-on-one assistance that they obviously need, evident from the comments of informants who could not get through to eBay or could not find a way to contact eBay.

Research Question 6

What rules have enabled and/or constrained access to information that online entrepreneurs deem to be helpful or useful? As discussed previously, this idea of rules has a basis in structuration theory, which is concerned with the rules and resources that compose social structures, the way these structures constrain human action, and the way these structures are continually altered through social action. In other words, while these structures provide rules to guide individual actions, the

resulting actions are responsible for the creation of new rules and the reproduction of old rules (Littlejohn, 1996).

A review of the interview and focus group data indicated that study participants made many references to "rules." For example, in response to the question: "What did you need to know as a beginning eBay seller and how did you find out?" one participant answered: "[p]rimarily the rules." In addition, several interviewees mentioned that one of their biggest problems was that the "rules" for doing things were frequently changed on the website: "they are constantly making changes. I haven't figured out who these changes are supposed to be helping, eBay or the seller, but I know that I just get a rhythm going, & they change something in the format & I have to start getting into the swing of it all over again;" "[t]he only problems I encounter are when they change their formats or update their services. Sometimes I have to re-adjust my way of doing things. I just putter through until it works for me." The word "rules" has also been used by study participants to describe something other than the rules on the eBay website. For example, one study participant mentioned the "rules" in her response to attitude regarding risk-taking by stating: "YES I am the push the envelope where there is a will there is a way, bend the rules, ignore the rules," apparently meaning that bending the rules or ignoring the rules is taking a risk.

The "rules" also surfaced in the document analysis of the help/discussion board listings. In the Auction Listings Help/Discussion

Board alone, I categorized 27 comments as relating to "rules." Many of these comments and questions were related to procedural rules. Even though these procedural "rules" might be listed somewhere on the eBay website, it frequently appeared that the users would rather have them interpreted by another user, possibly a user who had some experience with a particular rule. Another category of rules that was mentioned pertains to it being "illegal" to sell certain items on eBay. In addition, some users questioned others in the help/discussion board as to why they received warnings or suspensions from eBay, making it obvious that they were either unaware of the rules or did not understand the rules. Issues relating to "rules" are also mentioned on the Safe Harbor Help/Discussion Board, and the Trust and Safety Help/Discussion Board. Comments in the data from the Policy and User Agreement Help/Discussion Board include three instances in which users expressed concern that there are different rules for PowerSellers, which they construed to be more permissive.

In my own experience selling on eBay, I never read any rules on the website. I began selling on eBay very early in its existence, 1996, I was not aware of any rules on the website. My thought now is that perhaps there were no "rules" posted on the website in the beginning, or if there were rules, I never saw them. Later on, I had only one problem with rules: I was reprimanded for attempting to sell multiple items from a single listing. At the time, I was not aware of any rule against this

practice. In fact, I was enacting a practice which is common at face-to-face auctions: I was offering the high bidders a chance to purchase any number of items they chose from a particular group of items at the winning bid price. This is normally referred to as "choice." When I was reprimanded for this practice, however, I realized that another eBaysian must have reported me to eBay for what he or she perceived as an infraction of the rules, and that eBay must rely on auction participants to "turn in" rule breakers.

My next exposure to eBay rules came about when I tried to contact online sellers to participate in my interviews and focus groups for this study. When I was selling online, contacting another user was as easy as clicking on that person's User ID on an auction listing, getting the e-mail contact information, and sending that person an e-mail message. I found when doing my research that this contact between buyers and sellers is now mediated by eBay. As reported earlier, the imposition of this new rule made data collection much more complex than I had originally expected. Indeed, as noted, my original efforts to contact eBay sellers directly to identify as informants eBay users whose User Ids were isomorphic with their email addresses were also regarded as an infringement of eBay policy. This policy, as it turned out, provided "rules" governing whom I could contact, how I could contact them, and what I could say to them.

Summary

This chapter presented the data gathered from the online focus groups and the online interviews. In addition, the data gathered from the document analysis of the 16 Help/Discussion Boards on the eBay website, the Library area of the eBay website, and the *eBay Life* newsletter were also presented. The next and concluding chapter presents an analysis of the data, a discussion of the research questions, and the implications of the study as it relates to the field of library and information science.

CHAPTER 6

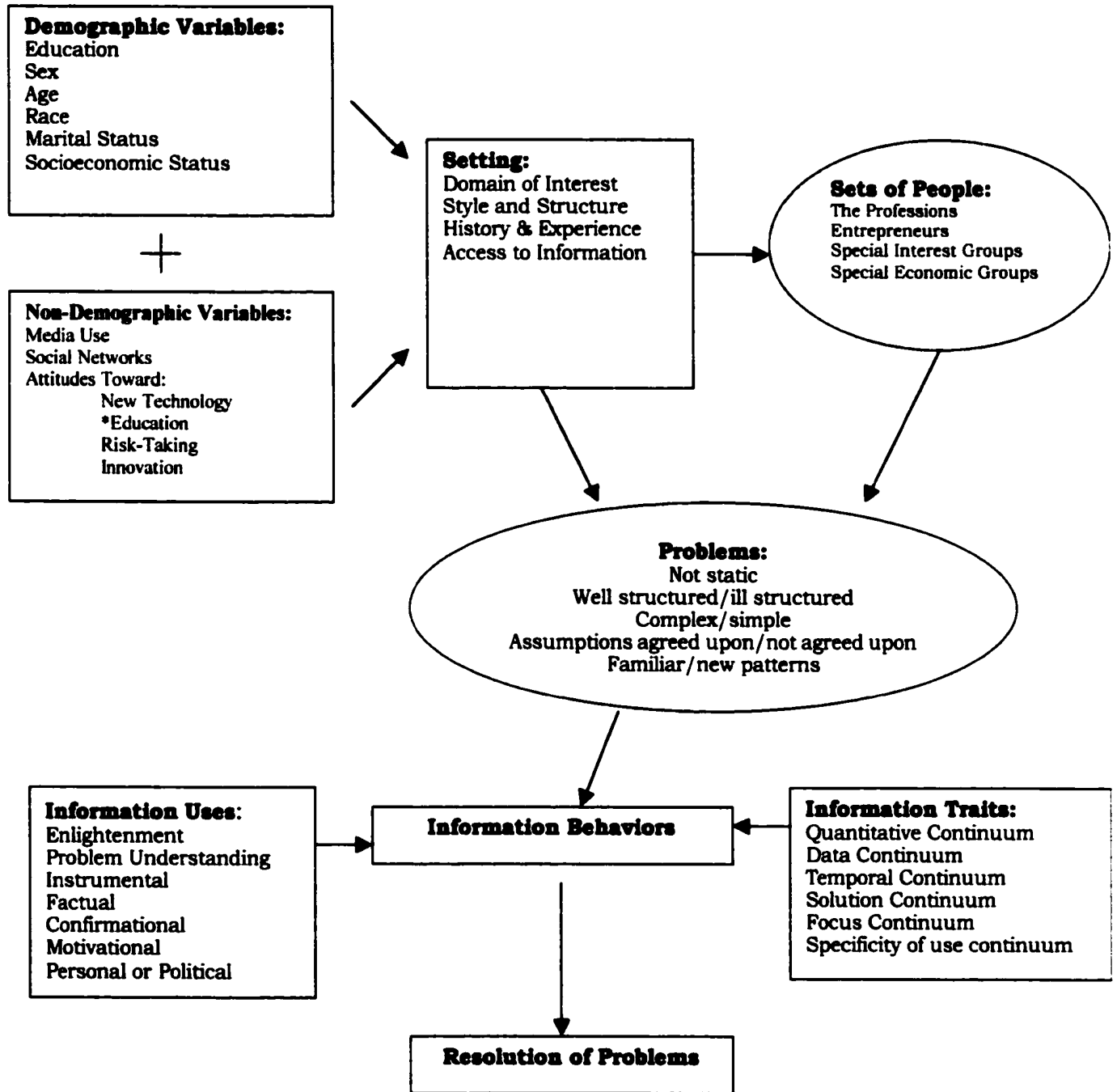## DISCUSSION AND IMPLICATIONS

Introduction

The purpose of this study was to examine online information seeking in general and business information seeking in particular by examining the information use of online auction entrepreneurs. Specifically, this research employed theories of social constructionism, roles, and bounded rationality to explore Taylor's (1991) model of the Information Use Environment (IUE) within the context of the eBay online auction. The research questions were constructed to determine the role of information to this particular domain of entrepreneurial activity and decision-making and the information-seeking behavior of a purposive sample of eBay entrepreneurs. The research questions also targeted the information sources and resources that eBay auction entrepreneurs considered useful; the reasons they considered them to be useful; and the information formats that study informants found the most helpful. In short, it was hoped that data collected would facilitate the description of the information use environment of online auction entrepreneurs working in the eBay auction environment as well as the rules that enable or constrain access to the common stock of knowledge necessary to successful enactment of the entrepreneurial role in this environment.

Taylor's Data Structure

According to Taylor's (1991) model, the data collected should be structured to describe a set of people, the problems of this set of people, the setting in which these problems arise, and what constitutes a resolution to these problems (See Figure 1, Graphical Model of Taylor's (1991) Data Structure). In order to construct a model of the information use environment of the online auction entrepreneurs included in this study, data collection included the informants' age, sex, marital status, race/ethnicity, and education (Table 1 and Table 2); media use (Table 12); as well as informants' attitudes toward new technology (Table 8), formal education (Table 9), risk-taking (Table 6), and innovation (Table 7). While a direct question regarding use of social networks was not asked of the study participants, their attitudes toward networks emerged in their discussions of their eBay experiences.

An analysis of web page documents available on the eBay Website provided data useful in describing informational elements available in this entrepreneurial setting or context. Participants selected for the study were queried in online focus groups and online interviews regarding the problems they encountered while working in this setting as well as what constituted satisfactory resolutions to their problems (Appendix H, Appendix I). The results of the data collected were presented in Chapter 5.

Figure 1. Author's graphical representation of Taylor's (1991)

information use environment data structure

Demographic Variables:
Education
Sex
Age
Race
Marital Status
Socioeconomic Status

+

Non-Demographic Variables:
Media Use
Social Networks
Attitudes Toward:
      New Technology
      *Education
      Risk-Taking
      Innovation

Setting:
Domain of Interest
Style and Structure
History & Experience
Access to Information

Sets of People:
The Professions
Entrepreneurs
Special Interest Groups
Special Economic Groups

Problems:
Not static
Well structured/ill structured
Complex/simple
Assumptions agreed upon/not agreed upon
Familiar/new patterns

Information Uses:
Enlightenment
Problem Understanding
Instrumental
Factual
Confirmational
Motivational
Personal or Political

Information Behaviors

Information Traits:
Quantitative Continuum
Data Continuum
Temporal Continuum
Solution Continuum
Focus Continuum
Specificity of use continuum

Resolution of Problems

The following section explores the information use environment of online auction entrepreneurs working within the context of the eBay auction. The design of this section reflects as closely as possible the format utilized by Taylor (1991) in his analysis of the information use environments of engineers, legislators, and physicians.

The Information Use Environment and the Structure of this Study

According to Taylor (1986), the information use environment is the context within which users make choices about the usefulness of information based "not only on subject matter, but on other elements of the context within which a user lives and works" (p. 218). These elements then "(a) affect the flow and use of information messages into, within, and out of any definable entity; and (b) determine the criteria by which the value of information messages will be judged" (pp. 25-26). Taylor (1991) maintains that data about information use environments is made up of four elements: the setting, sets of people who are living or operating in this setting, the types of problems these sets of people experience, and what they consider to be a resolution of these problems. His main thrust, however, is the information behaviors of these sets of people, as these behaviors are "the sum of activities through which information becomes useful" (p. 221). Referring again to his suggested data structure, Taylor (1991) believes that these four elements produce information behaviors and that information behavior varies among different sets of people. His data-structuring model is an attempt "to

begin to isolate similarities *and* differences among varying populations in specific contexts" (p. 219).

According to Rosenbaum (1996), who studied the information use environment of managers, the information use environment consists of problems, problem resolutions, and the rules and resources that constrain or enable information behaviors. Rosenbaum further asserts that the rules and resources have two important functions: to control the flow of information and to provide the criteria by which information can be valued. It could be stated, then, that the sets of people living or working in a particular context experience problems which they attempt to resolve through the rules and resources that make up their particular information use environment.

The Model

The data structure for my study has been altered slightly from Taylor's more linear treatment. Figure 2 details the data structure for this study. The information use environment (IUE) of the online auction, eBay, is made up of entrepreneurs and their tasks, the eBay organization and its resources and rules, its history and traditions. Problems arise within and are embedded in this IUE. These problems are not static problems and can have varying dimensions, which have an effect on the type of resolution that would be acceptable. Problems will also vary from entrepreneur to entrepreneur, depending on the demographic and other variables that describe each individual.

These problems, of course, give rise to information seeking or information behaviors. Problem resolution then takes place through these information behaviors in which the entrepreneur makes use of the resources that are a part of her information use environment. The information behaviors, however, are bounded by the entrepreneur's awareness of usable resources. Use of these resources, which can be allocative, authoritative, or administrative, is affected by the rules of the information use environment. The rules in this environment have been described as contextual or organizational and unwritten. Problem resolution, in this case, leads to socialization, which reifies the IUE and new problems arise. It is important now to individually examine each portion of the IUE that emerged from this study.

The Setting and the Set of People

In this study, the set of people examined is the one that Taylor (1991) called "the entrepreneurs." Taylor believed that "problems and their resolution in a management context are different from those in an engineering context, those in a teaching context from those in a physician's context, etc." (p. 219). He further asserted that individuals within a given context might have specific idiosyncracies depending on their personal styles, the rules and resources of specific situations, and specific experiences, that would cause them to solve problems and seek information in different ways. For this reason, Taylor believed that there

was value in conducting studies to examine sets of people operating in a wide variety of similar settings.

Entrepreneurs, which Taylor suggested as constituting a "set," also operate in a variety of contexts. Almost by definition, entrepreneurs in traditional contexts operate in isolation, each one deciding for herself what things should be done, when things should be done, and how things should be done. In short, in traditional settings the entrepreneur established the rules to be followed in running the business. Although it might at first appear that online auction entrepreneurs operate in the same way, informants in this study indicated that in fact their participation within the eBay environment made them subject to rules and regulations made by others. Thus, in this aspect at least, the eBay environment is a shared workplace, resembling an antique mall in which independent antique dealers sometimes rent spaces. And, while eBay entrepreneurs do not "pay" for the workspace in the traditional sense, they are in fact assessed a fee for each sale. It is as though these online dealers have a sort of "virtual lease" that exacts a percentage of the sales in lieu of rents.

Of course, it is also true that while in antique malls, the mall management often handles the actual sale of a dealer's items and packages and ships items if necessary, online entrepreneurs in this study sell their own items, work with the customers personally, and package and ship the items sold. However, eBay informants do have

access to resources available at the eBay website. The entrepreneurs using the eBay website also make their own business decisions, to a certain point. It is at this point that the rules that are as Rosenbaum (1996) suggests, a part of the information use environment, become apparent. These rules enable and constrain access to and use of information resources.

While it may be considered that all entrepreneurs as a set of people have similar problems, those entrepreneurs choosing to operate in an online setting might have very different problems and problem resolutions than those working in the bricks-and-mortar setting. And those entrepreneurs operating in the online auction environment of eBay might have very different problems than entrepreneurs working in a different online environment or a different online auction environment.

Taylor (1991) does believe that the activities of some sets of people such as small business people/entrepreneurs, legislators, or managers could be called professions even though they are "less dependent on formal education, and are more defined by context and the kinds of problems faced" (p. 223). Since there is rarely a formal education process for these sets of people, there is not a formalized means by which methods of problem recognition and resulting information behaviors are learned.

Business people, Taylor admits, may need special skills such as accounting, marketing, and special technical know-how to perform their

roles; however, the entrepreneurs in this study did not express any problems or need to gather information related to these skill areas. The lack of problems related to these skills areas was an interesting result of this study, because most of the study participants came to entrepreneurship from other professions or occupations for which they possibly did go through a formal education process. It is highly likely, however, that the formal education process they did experience did not necessarily include these skills areas. This also means that their problem recognition and information behaviors are affected by the formal education process to which they were exposed, previous work, and role experience.

Taylor (1991) maintains that the "organization and conceptual structure that these different sets of people bring to a particular context" (p. 223) gives value to information and makes it useful. It is not evident from this study, however, that the organizational and conceptual structure can be examined as what "sets" of people bring to this context. In examining the previous experience and other variables influencing the individuals in this study, it is obvious that what different individuals bring to the context must be considered rather than what "sets" of people bring to the context.

Figure 2. Graphical representation of the online auction eBay information use environment.
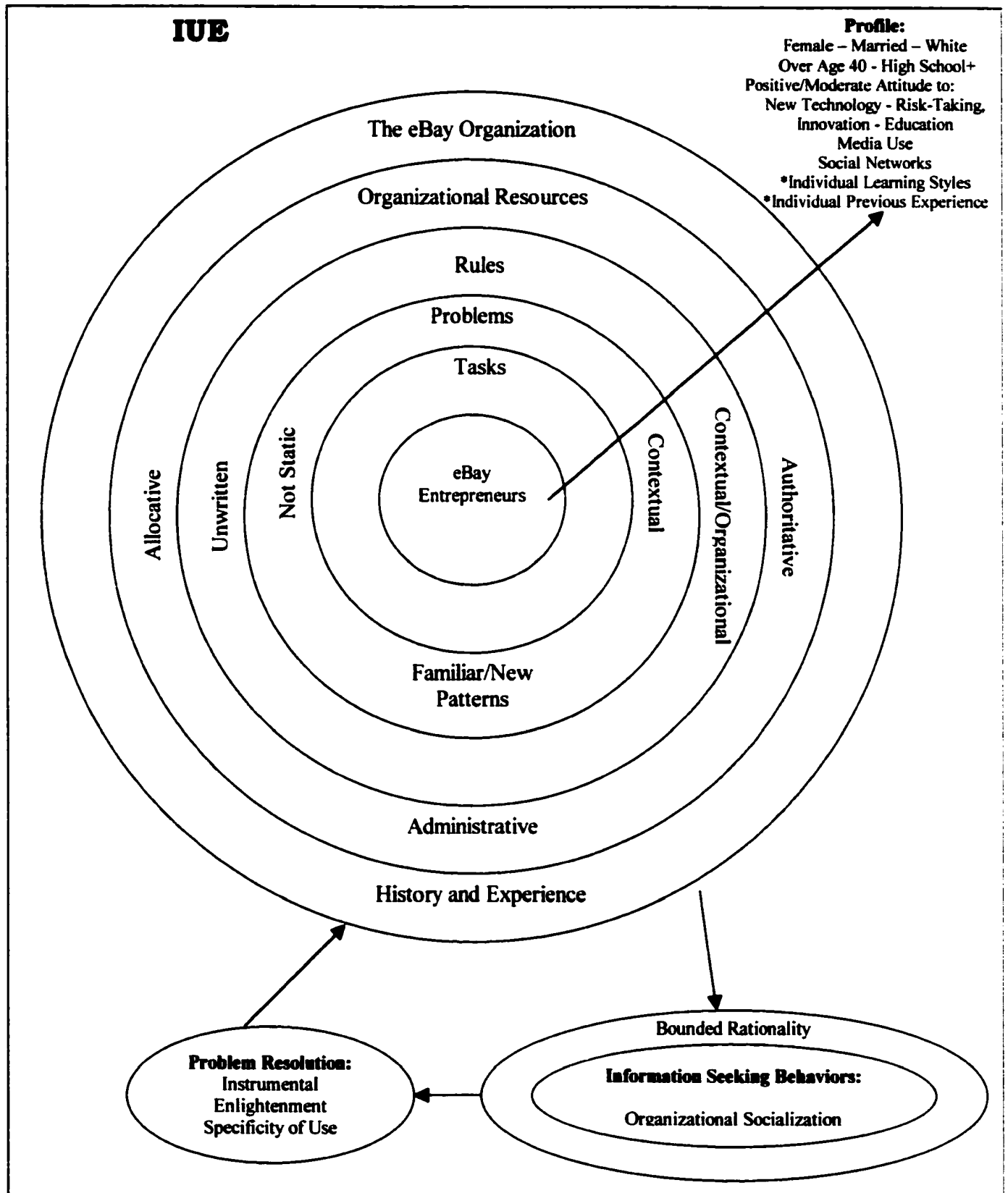
As an example, all people selling glass may have a set of problems that are similar, while people selling glass online have yet another set of problems, and those people selling glass online at eBay have still another set of problems. In addition, an accountant who sells glass on eBay part-time may perceive problems and seek problem resolutions differently than an eBay glass-seller who is a nurse. Each layer of the model can add a different set of problems that may arise when working in the context. Although studying a set of people is what Taylor set out to do, the addition of the demographic and other variables to the model adds some individualization to the particular set of people being studied. Consequently, these variables affect each individual's approach to the situation and even the perception of problems. Once the context has been entered, all people working in that context will have in common the fact that they are enabled or constrained by the rules and resources found there. Consequently, Rosenbaum's (1996) addition of rules and resources to the Taylor model is extremely important. Many variables exist that may have an effect on the resultant information behaviors.

Demographic Variables

In this study, more than three-fourths of the respondents were over age 40 (78 percent) and female (79.4 percent), while almost three-fourths of them were married (70.5 percent). All of the respondents were white (100 percent). In addition, almost three-fourths of the respondents indicated they had an education level beyond high school (73.5 percent).

It is not surprising that all respondents in this study were white if this is compared with the education demographic (Table 2). In *Bridging the Digital Divide: The Impact of Race on Computer Access and Internet Use*, Hoffman and Novak (1998) found that across all levels of education, "whites are more likely to own a home computer than African-Americans" (Hoffman & Novak, 1998, When race matters section, ¶ 2). Since almost three-fourths of the respondents had an educational level beyond high school, this could have had an impact on the likelihood that they would be white. In addition, a 1998 study conducted by Babb (Hoffman, Novak, & Schlosser, 2000) that investigated Internet use and home computer ownership among minorities and low-income people found that across seven different data sets, African Americans and Hispanics were less likely to own home computers. This was the most important finding of the Babb study even after adjusting for income and education. Though the results of the Babb study show the likelihood that the respondents in my study would be white, neither study accounts for the lack of representation of the other races listed on the questionnaire.

Consistent with other studies that have shown that the number of female entrepreneurs has been steadily increasing since 1969 (Caputo & Dolinksy, 1998), the majority of respondents in my study were married white females over the age of 40. A conclusion that could be drawn from this data is that married white females over the age of 40 with education beyond high school have found that online auction entrepreneurship is

something that works for them. In addition, research studies show that women choose entrepreneurship for many reasons, the most important of which are the desire for challenge and self-determination, the desire to balance family and work responsibilities, and blocks to career advancement that are prevalent in large organizations (Buttner & Moore, 1997). A number of research studies concluded that entrepreneurship gives mothers more flexibility to manage domestic and employment responsibilities (Birley, 1989; Brush, 1992b; Scott, 1986), while other studies suggested a relationship between women's choice of self-employment and the presence of young children in the home (MacPherson, 1988; Connelly, 1992). Because it allows women to work in a home-based environment, online auction entrepreneurship quite possibly provides a better self-employment vehicle than a more traditional venue. The online auction environment also provides a better self-employment venue for women for whom cash flow management and start-up capital constitute barriers (Brush, 1992b).

A series of research studies analyzed by Morahan-Martin (1998) suggested that females have less experience with technology and fear technology, characteristics which increase their resistance to adopting new technology, especially computers and the Internet. Furthermore, these studies show that males are more likely to own and use a home computer than females, use a variety of computer applications, and take part in computer-related leisure activities. Given these circumstances,

why would the women in this study choose to conduct business in an online environment? The research of Canada and Brusca (1992) suggests one answer. Studies they analyzed provided evidence that since females traditionally avoid competitive situations, it is the competitive male environment surrounding the field of technology and computers that women wish to avoid, rather than the technology. The data in my study suggests another answer. The computer may in fact be the leveling agent for their entry into the business world. Furthermore, the participants in this study had overwhelmingly positive or moderate attitudes toward new technology and innovation. Perhaps the possibilities that the eBay context provides override any residual negativity they feel toward technology. In fact, they may have the belief that learning to use the technology is a small price to pay for entry into a business arena where the kinds of barriers to career advancement that exist in large organizations (Buttner & Moore, 1997) do not exist. In addition, Morahan-Martin's (1998) research found that females are less likely than males to reproach those displaying offensive behavior. When they do reproach others, it is with less offensive statements than used by males. Their hesitancy to reproach others could account for the study informants' major concerns regarding non-responding and non-paying buyers and issues such as feedback retaliation.

Education might also have a different effect in this model (Figure 2) than what Taylor originally intended. Taylor (1991) believes that

entrepreneurs or small business people, legislators, farmers, and managers are more defined by the specific context and the problems they face in that context than by formal education. In this study, where most of the respondents work as part-time entrepreneurs, their previous experience and educational background have more relevance to problem perception and resolution.

Other Variables

In this study, all participants had a positive or moderate attitude toward new technology and innovation (Tables 7, 8), while a great number of them had a positive or moderate attitude toward risk-taking and formal education (Tables 6, 9). It is possible that these attitudes really show an affinity for entrepreneurship in general, evidenced by their attitude toward risk-taking, and toward the online environment evidenced by their attitudes toward new technology and innovation. In addition, education level may possibly be the variable that influenced these attitudes in this group of respondents, although other influences are also possible.

Just as preferences for media use and use of social networks are included as variables in this model, the preferred learning styles of the information seeker should also be included. The preferred learning styles could have a definite impact on the information-seeking process in addition to the format of information chosen in the information search. For example, the Myers-Briggs Type Indicator (Webb, 1990) differentiates

between extroversion and introversion, sensing and intuition, thinking and feeling, and judgment and perception. This is an extremely valuable tool in determining how a person might prefer to seek and procure information. Extroverts would probably prefer and seek out oral information sources, while introverts would prefer written or textual information. Because the data shows a preference for the real-person types of information sources, this may indicate a preferred learning style of the study participants.

The Setting, The Problems, and Problem Resolution

The graphical representation of Taylor's information use environment presented in Figure 1 is my interpretation of the data structure he presents. Taylor's (1991) assertion that information behavior is the product of the assumptions that a set of people makes about work, problems, the environment, and problem resolutions was supported by the data collected in my study. The additional data that emerged from my study, however, begs for a graphical analysis of the relationships in the data structure that is a bit more complicated than Taylor's presentation. The data structure presented in Figure 2 incorporates my observation that the kinds and structure of problems deemed important and typical by the set of people studied--in this case, online auction entrepreneurs operating in the eBay context--is framed by the demographic and other variables and the tasks they perform in this environment (Table 10).

Problem Dimensions

In this study, most of the problems experienced by respondents were context-related (Table 39). Time spent working in the context and continuing experience in the environment also contributed to changes in the problems experienced by the study participants. The effect of experience or length of time as an online entrepreneur was noted in the difference in problems experienced by those initially considering online entrepreneurship, new online entrepreneurs, and experienced online entrepreneurs (Tables 13, 14, 15). Taylor also believes that the problem dimensions he defined in an earlier study (MacMullin & Taylor, 1984) would appear to have an influence on the kind of information considered to be useful. In this study, most of the problems of the participants could be described by MacMullin and Taylor's familiar/new patterns category. Problems of this type are described as mostly procedural and "rely on well-established method and techniques built up over centuries of practice" (p. 226) to solve. Interestingly, this description goes on to state that "[w]hen this is not the case, trial and error become standard procedure" (p. 226). Trial and error proved to be a major problem resolution method for the study participants at the initial consideration level, the new seller level, and the experienced seller level.

Problem Resolution

Taylor (1991) asserts that a single question-and-answer usually does not resolve problems, but that different types of information are

called for to resolve different types of problems, which in turn is responsible for the different uses of information for problem resolution. From the eight classes of information use that Taylor has provided, "instrumental" is the class that describes the type of information needed for the resolution of most of the problems of the participants in this study. "Instrumental" is described as "finding out what to do and how to do something; instructions; under certain conditions, instrumental information needs will define the need for other types of information" (Taylor, 1991, p. 230). Aside from problems in the instrumental class, a smaller number of problems experienced by the study participants could be classified in the "enlightenment" or "factual" class. "Enlightenment" is described as "the desire for context information or ideas in order to make sense of a situation" (Taylor, 1991, p. 230).

Problems classified in the "factual" class accounted for a higher number of problems at the new seller and experienced seller levels. "Factual" is described as "the need for and consequent provision of precise data" (Taylor, 1991, p. 230). Finally, while some of the actual problems described by the participants do not support this statement, many of the comments of the participants show that the "motivational" classification is an important one. The "motivational" class "has to do with personal involvement, of going on (or not going on)" (Taylor, 1991, p. 230). Several participants mentioned that they were ready to quit, until they received assistance from other eBaysians of the motivational class

that helped them to go on. Consequently, even though several classes of information use are revealed through the data collected in this study, most of the problems of the participants in this study are context related in the instrumental classification and not related to the role behaviors of entrepreneurship in general.

Finally, Taylor (1991) asks "if there are identifiable traits inherent in information, beyond subject matter, that can be related to the dimensions of problems and to the needs of people" (p. 231). MacMullin and Taylor (1984) isolated and described a variety of information traits of which the specificity of use continuum is most prevalent in this study. The specificity of use continuum is described as "ranging from applied (instrumental, immediately useful) to substantive (descriptive, know-what) to theoretical (explains and predicts why something works as it does)" (Taylor, 1991, p. 231).

Methods of problem resolution definitely changed for the participants in my study from the initial consideration stage to the experienced seller stage. Entrepreneurs at the initial consideration stage preferred trial and error as the main method of problem resolution, while new sellers and experienced sellers used either the eBay website or eBay technical support. This reliance on trial-and-error during the initial consideration period could be a result of a lack of awareness of other methods of resolution, described in the theory of bounded rationality. The experience gained by beginning to sell and gaining some experience

selling allowed the participants to develop an awareness of the information available at the eBay website or through eBay technical support, while those in the initial consideration stage were constrained by their inexperience and did not know this was available. At the initial consideration stage, the eBay website and eBay technical support ranked second as a method of problem resolution followed by previous experience. Again, it appears as though bounded rationality may have an effect on sources chosen because the eBay website is a logical choice for finding information. Relying on previous experience, on the other hand, is a bit like trial-and-error. This finding would seem to point to the fact that, when those in the initial consideration stage did not find what they needed at the eBay website, they were still constrained by their lack of knowledge of potential resources and reverted to their own previous knowledge. For study participants at the new seller stage, asking family, friends, and co-workers was the second most popular method of problem followed closely by trial-and-error. Again, this may show that the new sellers were also affected by bounded rationality in their choice of problem-solving methods. Family, friends, and co-workers are another convenient choice for assistance, while trial-and-error can be a result of either not finding assistance in another area or simply a lack of any other means of assistance.

At the experienced seller level, the study participants showed less of a need for the instrumental type of resolution than did the participants

at the initial consideration level and the new seller level. The data

supports conclusions made by Kuhlthau (1997a) in her study of

information behavior of a securities analyst. In her study, she concluded

that as a person becomes more familiar and proficient in a particular job,

the information-seeking and use process changes.

Organizational Socialization Theory

While role theory initially seemed to offer a promising theoretical

framework for this study, the data shows that study participants did not

describe what they did in terms of roles, nor did they talk of problems

related to the roles one might associate with entrepreneurship, such as

manager or accountant. The participants in this study described what

they did in terms of activities (Table 10) or tasks. Roles can be described

more broadly as activities, duties, responsibilities, or required behaviors

(Champoux, 2000). The failure of my informants to think of their online

activities as roles does not necessarily preclude role theory as a

framework for analysis. Because the informants in this study have a

definite idea of their activities and their responsibilities, especially to

their customers, it may be that they just do not view the business-related

entrepreneurial duties as important. It is evident that they do see

themselves as doing business, which was obvious in the comments they

made advising others, categorized as unwritten rules. Since most of the

activities the study participants described and the problems they

experienced were context related, it seems likely that if these

entrepreneurs were working in other contexts, they might experience different problems and identify different activities or tasks.

Many study informants spoke of their need for information in order to succeed as new eBay entrepreneurs. These new online entrepreneurs were seeking the information that will allow them to perform the tasks they associate with the role of an online eBay entrepreneur. This suggested that using organizational socialization theory coupled with role theory as a framework was a better way to understand their experience. This is a logical progression because role assumption is an integral part of organizational socialization. The process of organizational socialization might be described as the way that people learn about an organization's culture. This learning process involves becoming adjusted to a new organization, a new job within that organization, and the new groups of people therein. This theory addresses an individual's fit within the organization focusing on an employee's acquisition of the values, attitudes, and role behaviors necessary to survive in the organizational environment (Champoux, 2000).

According to Louis (1980), in order for individuals to become socialized into a new organizational context, they must learn to understand and make sense of their new settings. That is exactly what these online entrepreneurs were trying to accomplish within the eBay context. A study conducted by Ostroff and Kozlowski (1992) evaluated the extent to which organizational newcomers relied on various sources

to provide information about their contextual domains. They found that observation of others was the source used most frequently, while interpersonal sources were second. Though it was extremely difficult for the entrepreneurs in my study to observe others, some of them actually managed to do so; for instance, informants in the study examined the item listings or ads constructed by others to determine how they should create their own ads. One entrepreneur went even further, bidding on and buying items to evaluate just how accurate their listings had been. Interpersonal sources and trial-and-error experimentation were also important information resources. Ostroff and Kozlowski (1992) found that information acquisition from observation and trial-and-error was the source of considerable stress. The comments made by many of the participants in my study that indicated they were experiencing stress in dealing with online selling reflects the experience of Ostroff and Kozlowski's informants.

Kreitner and Kiniciki (1998) provide a model that describes three stages of organizational socialization. The first step, anticipatory socialization, or getting in, involves the development of pre-entry expectations and attitudes about an organization and the job. At this stage, important sources of information are friends, relatives, other employees of the organization, and business reports. The second step, encounter, or breaking in, involves mastering the skills of the new job, becoming familiar with how things are done in the organization, and

becoming familiar with the organizational culture (e.g., shared attitudes, values, and expectations). Finally, at the third step, change and acquisition, or settling in, one becomes a full member of the organization and part of the in-group with the ability to influence others. Krietner and Kinicki's socialization model fits closely with the socialization process described by the participants in this study. For this reason, organizational socialization is an important aspect of information seeking in the model I have proposed (See Figure 2).

The Setting and The Rules

One of Rosenbaum's (1996) findings was that rules played a major role in his structurationally-informed value-added concept of the information use environment. For example, rules provided the managers in his study with "a set of generalized procedures or techniques that can be drawn upon in the conduct of information behaviors to form, sustain, terminate, and recreate them with efficiency and, many times, with an ease which is taken for granted" (p. 444). Quoting Giddens, Rosenbaum further asserts that "rules are crucial factors in the conduct of information behaviors because they 'help to constitute and regulate activities, defining them as activities of a certain sort"(p. 445). While the respondents in my study were not asked a direct question about the rules in this particular environment, their responses to interview questions indicated the importance of two different types of rules they

encountered as eBay sellers: context specific or organizational rules; and unwritten rules.

Context or Organizational Rules

My review of the Help/Discussion boards and other resources on the eBay website indicates that the eBay organization provides an entire web page of links to the various rules that govern activities on the website. There are rules for buyers, rules for sellers, and rules for PowerSellers. From comments made by study participants, it appears that, in many cases, they are constrained by the constant changes in the rules that require them to spend time determining how the new rules affect their activities and to consider how they must change their practices to adhere to these rules. In addition, rules on the website govern procedures and discussions. While eBay has gone to great lengths to create a community atmosphere by making areas available for buyers and sellers alike to meet and talk through the Chat Boards and the Help/Discussion Boards, there are strict rules that govern what can be discussed; infringement of the rules can result in suspension from board usage or suspension from the entire eBay website.

Unwritten Rules

The interviewees and online focus group participants were asked one final question: what they would tell somebody in the way of advice if that person were thinking about becoming an online seller. All study participants (n=41) responded with a list of advice for potential sellers.

Taken together, these comments provide important insights into the attitudes of these online sellers toward what they are doing. Many of these topics were mentioned so frequently that they have been included in my model as the "unwritten rules" that sellers follow and that they would encourage other sellers to follow, rules that have become a part of the common stock of knowledge for those selling on the eBay website. These rules are not rules created by the eBay organization, but rules based on what the eBay entrepreneurs in this study have discovered by virtue of their participation in this environment and with others in the environment. An examination of the rules demonstrates that these people take this work seriously. While many of them say that this activity constitutes a hobby, a commitment toward approaching online selling as they would any job or any business venture is evident in the comments. In addition, some of the comments do reflect the problem areas revealed through data collection, in addition to revealing some of the preferred sources of problem resolution.

Figure 3. Unwritten rules

Unwritten rules for eBay success

- Hard work

- Motivation

Unwritten rules for customer service

- Obligations to the customer

- o Accurate representation

- o Research – know your merchandise

- **Honesty and ethics**

- **Customer is always right**

Unwritten rules for business ownership

- **Responsibility**

- **Treat it as a small business**

The most frequent advice offered by eBay informants involved the amount of work and time involved. This advice might be considered as unwritten rules for eBay success. Comments such as: "Be prepared to work hard;" "It's a lot more work than you might think;" "You have to love it;" "Be prepared to spend a lot of hours on the Internet;" "Email probably takes more time than the rest put together;" "It's a lot of work and you can get burned out;" "It is a very time consuming job;" "It is a full time job;" and "You must have drive and motivation to stick to it" are representative of the advice given in this category. "Don't get discouraged...goof ups and disasters are part of doing business," counseled one informant. Others echoed this sentiment in such statements as: "Don't give up your day job for at least 6 months," "Don't expect a sales onslaught," "Go slow," and "Don't get caught up in money issues...sometimes it comes in and sometimes it doesn't." Another informant concluded: "Relax and enjoy and have fun."

Another theme in advice informants offered involved information and research. This category of advice might be described as unwritten rules regarding obligations to the customer. Study participants recommended: "Know your merchandise," "Do as much research as you can before you start," "Work with items you know," "Continually look for more information and never stop doing research," "Do the research or you may get more than you can handle," "Become knowledgeable in some collectible category," "GET BOOKS," "Hard part is learning about the various items," "Pick one area and study items and prices," "Specialize in one kind of merchandise and know it well," "Study other sellers very carefully before starting your own online business," "Contact somebody with experience on eBay," "Do homework first" and "Research all items thoroughly, don't guess." These comments reveal a strong sense of duty to the customer to accurately represent what is being sold.

Additional comments related to the customer could be described as unwritten rules regarding customer service and encompass the topic of honesty and ethics in buying and selling. It is likely that these unwritten rules are a response to informants' concerns with issues of feedback, non-responding buyers, non-paying bidders, and fraud. Examples included: "Be honest and open with folks. Treat your unknown electronic customers like a friend or neighbor;" "Representation is the soul of the seller. Be honest and objective in representation;" "Have strong ethics and integrity. Anyone can mislead a person and take their money; it

takes integrity to keep them coming back;" You must be honest and ethical;" "Don't try to sell if you are unfamiliar with what you are selling and how much it is worth;" "Honesty and knowledge will be your best friends;" and "Treat each customer as if he/she was your only one. Deliver what you promise."

Some comments depicted overall unwritten rules for business ownership. A concern for customer service was also evident in informants' comments. "Be patient, ship quick, help others, and it's a business, treat it that way," offered on respondent. Others added the following: "Be prepared to take the responsibility of owning and operating a small business;" "BE HONEST;" "Don't waste your time if you can't have the attitude that the customer is always right;" and "Customer Service!!!"

The Resources and Problem Resolution

While resources are not specifically represented in Taylor's (1991) data structure for the information use environment, they are an important aspect of problem resolution. In Rosenbaum's (1996) study of the information use environment of managers, he included resources as an integral part of his model. In his research he defined a resource as "a social or material element of the organizational setting that can be drawn upon and used by members to carry out information behaviors" (p. 348). His view of resources focuses on Gidden's (1984) statement that resources are drawn upon and used by knowledgeable individuals during

the course of interaction, thereby becoming a mode through which power is exercised in the social world. Rosenbaum (1996) breaks down the resources in his study according to the types of power they can be used to exert: allocative, which allow his managers to exercise command over objects and processes; authoritative, which give the manager command over people; and administrative, which give managers the opportunity to exercise command over people engaging in information behaviors. According to Rosenbaum, some resources such as information technology are dual in nature and can be used as either allocative or administrative, depending on the purpose.

The eBay website makes many resources available to its users. Some of these resources could be described as belonging in Rosenbaum's (1996) categories of allocative, authoritative, or administrative. Many of the eBay-supplied resources such as tutorials, FAQ's, technical support, or the help/discussion boards are designed to provide the users with information that allows them to exercise command over the objects and processes they are trying to master in order to successfully sell in this online environment. A resource such as a feedback rating could be both authoritative and administrative because it allows the user to exercise command over people and command over people engaging in information behaviors.

A preference for real-person resources for problem resolution is evident in the responses from the study participants, especially in the

earlier stages of initial consideration and new seller. Since e-mail simulates conversation rather than a written correspondence (Goodman, 1993) online "personal" contact seems to serve the same purpose for these online entrepreneurs. This is evident in the respondents' usage of eBay technical support or other eBaysians through e-mail or the discussion boards. It is not surprising that online personal contact would suffice, because they are operating in a totally online workplace at eBay. This preference for the "personal" sources matches the bulk of the business studies on entrepreneurs and small business owners/managers that show a preference for personal, face-to-face sources to meet information needs. Even though online personal contact appeared to work for many of the study informants, a need to make telephone contact with eBay as the authoritative source still emerged from many of their comments.

The fact that so many of the study participants relied on the "real person" type of resources, such as eBay technical support or family and friends, might also indicate that many of the study participants seek to solve problems by the easiest and quickest method possible. Sometimes it is much easier to ask somebody than to try to ferret out the solution on one's own. This might be viewed as a way of satisficing, which according to Herbert Simon (1976) means that they search for the course of action that will be satisfactory, or good enough.

Information Behaviors

In an examination of the activities of the online auction entrepreneurs who participated in this study, it is evident that a large percentage of their time is spent "creating, seeking, manipulating, evaluating, and using information" (Rosenbaum, 1996, p. 393). Creating digital images and correspondence with buyers were listed as the top activities for this group of online entrepreneurs, closely followed by writing the description of the item for sale or the ad, as some described it. Actually creating and processing the digital images and writing the item description could all be combined as the activity of creating the advertisement or item listing. Research was also mentioned as an activity in 26.8 percent of the responses.

Because of the methods of problem resolution noted by the study participants, the conclusion can be drawn that one of the major information-seeking behaviors of the study participants was trial and error, which involves a great deal of work and a low frustration level. It may be that the study participants would have satisficed if they could have found a quick and easy answer to the problem, but quite possibly they could not because they were bounded by a lack of knowledge of other resources, thus resulting in such high reliance on trial and error to solve their problems. Many study participants searched for problem-solving information on the eBay website, while others employed networking—seeking problem-solving information from family, friends,

co-workers, or other eBaysians. In reality, the information behaviors of the participants in this study were aimed primarily at organizational socialization tasks.

Problems Encountered in Retrieving Information

Study participants specifically indicated that the only problems they had retrieving information from the preferred sources of information listed on eBay related to making personal contact with eBay personnel. However, responses to interview and focus group questions and a great deal of the conversation on the Help/Discussion Boards indicated an inability to find information and help with problems on the eBay website as well. While some study participants state that eBay "has a pretty fine-tuned program for the most part," "eBay has links to basic tutorials," "eBay is wonderful at helping solve problems," "eBay's information made it simple," and "eBay gives the information, I just need to follow through," other participants made comments such as "my issues are with eBay—they are only after money since they went public and are of very little help when you have problems," and "eBay rules protect buyers but leave sellers in a hopeless position regarding feedback and collection." It may be that the discrepancy in the ways that users are experiencing eBay information and eBay assistance are related to a lack of online experience. However, it might also reflect a difference in styles of information processing that plagues those who cannot obtain the kind of "personal" one-on-one assistance that they obviously need.

With modifications related to rules and resources, previous experience, and learning style differences, the data from this study fits Taylor's (1991) model (See Figure 2). The addition of the new variables to the model, which together emphasize differences among persons identified within the same "set," is consistent for an IUE in which people from quite diverse backgrounds find a common ground in entrepreneurship.

Conclusions, Recommendations, and Relationship to Theoretical

Framework

In the process of creating a model of the information use environment of the online auction entrepreneurs in this study, a thorough examination was made of the individual entrepreneurs/sellers, the perceived information needs of new sellers based on problems experienced, the perceived information needs of sellers after the acquisition of experience in the online auction selling arena based on problems experienced, and preferred information sources. The information-seeking process of these entrepreneurs consists of an attempt to locate problem-solving information through the preferred information sources.

Though new online auction entrepreneurs reported basically the same problems as experienced online auction entrepreneurs, there was a slightly different importance attached to the various categories of problems experienced. It was obvious that many of the problems for

most new and experienced entrepreneurs were related to the technology itself. Consequently, for new online auction entrepreneurs basic how-to types of information on processes requiring instructions were extremely important. Taken together, the problems, problem resolutions, and information behaviors of the participants in this study indicated organizational socialization behavior.

While working in the context of the eBay website consists of working in an extremely information-rich environment, it was noted from this study that the information provided at the website did not meet the needs of all study participants for the acquisition of problem-solving information. While many of the study participants did state that they were able to locate the needed problem solving information on the eBay website, those who were not able to gain assistance from eBay may have suffered from a lack of awareness as to just what information was accessible for assistance, simply because there is so much information available. In the theory of bounded rationality, lack of knowledge creates boundaries to awareness of all available options for problem solving. How can people search for something that they don't even know exists?

The eBay website provides a great deal of information in a variety of places, and those initially considering online selling or the new sellers could definitely be limited by their lack of knowledge of the website itself. In addition, inexperience with the Internet and its subsystem forces sellers to rely on their own resources to solve problems. As previous

research in a variety of contexts has shown, in new contexts many people prefer the familiar face-to-face style of personalized information sources, specifically, the ability to ask a question and have it answered by a person. There is also an expectation that such assistance will be available. For example, problem solvers attempting to find information in a library or other similar information agency, surrounded with all types of information in various types of formats, have the option of requesting assistance from a real, live librarian or other information professional. Research, however, often shows that information searchers rarely ask for assistance (Kuhlthau, 1993). The online auction entrepreneurs in this study, along with many eBay users who posted questions and concerns in the online Help/Discussion Boards, showed an apparent preference for the online equivalent of the face-to-face, personal types of information sources. The business literature includes examples of similar findings for entrepreneurs and managers.

When the study participants were asked to describe their role as an online auction entrepreneur, most of them described this role in terms of the various tasks they undertake daily when selling online. One seller in particular, though, stated that in her role as an online auction seller she believed that she provides "easy access to merchandise to my customers that they can't find in their area." It is interesting that the tasks listed and the problems defined by the study participants were overwhelmingly context-related. They did not mention many business-

related problems, as might have been expected. This raises the question as to whether or not eBay entrepreneurs see themselves as businesspeople. It would also be interesting to determine whether eBay management views their sellers as entrepreneurs. Evidence of such acknowledgment on the website at the time of the study is suggestive as only one newsletter provided a link to an Internal Revenue Service website, and generalized tutorials on business ownership were not found.

According to Biddle and Thomas (1966), the role of an individual within a group carries with it expectations of certain behaviors. Individuals are inducted into specific sectors of the common stock of knowledge because of the roles they play. The knowledge is not only the cognitive sense of knowledge but also knowledge of norms, values, and emotions (Berger & Luckmann, 1966). Many times this socialization takes place through formal educational training. Following this logic, it would seem likely that people who wanted to be entrepreneurs would study business or entrepreneurship. While some of the participants in this study have ful- time jobs as managers, many of them are not business people; consequently, they may be attempting to survive in a world totally unrelated to their previous experience. Bounded rationality theory that posits constraints on information seeking due to lack of knowledge of access and availability, and also rules out sources, seems to fit well with the information behavior of many newcomers operating in this IUE.

Implications for Change: eBay and Other Online Environments

For the participants of this study, interpersonal communication, or a reasonable facsimile such as personal communication via e-mail, is the favored medium for information seeking. While the information offered at the eBay website appeared to work well for some study participants, it did not work well for everyone; consequently, thought should be given to the provision of more personalized assistance. The findings of this study show that while considering the problems of a set of people, such as the online entrepreneurs, information providers must not limit themselves to compartmentalizing the population into groups or sets of people. While this activity has some merit, it should ultimately be supplemented by an examination of the individual information seekers themselves. For this reason, the demographic and other variables should remain an important part of the model for the information use environment. While Taylor (1991) asserted that education was the most important of the demographic variables, there are very important reasons to consider the other variables. In addition, the information seeker must not be viewed in isolation as simply an entrepreneur seeking the kind of information that entrepreneurs need to solve entrepreneurial problems. The information seeker, in this study an online auction entrepreneur, must be viewed in relation to all of the demographic and other variables, and in relation to the particular context in which she operates. Only then can there be complete understanding of the situation of the information

seeker. The best method of assisting information seekers is to get as close as possible to walking in their shoes and to gain a thorough understanding of the entire environment in which she operates on a daily basis. Information needs and information-seeking behaviors are a result of the individual with all of her variables as she is a member of a certain set of people working in a certain context with all of its inherent rules and resources.

Significance of this Study to Library and Information Science

Identifying the resources that the online eBay entrepreneurs considered valuable provides a great deal of useful information to information professionals who wish to design services for people attempting to conduct any type of business online, in addition to people attempting to survive and be productive in any type of online environment. First of all, the data from this study showed that most of the participants were able to find the information required or gain the assistance needed through the eBay website. It can be inferred from this finding that the type of information packages that information professionals presently prepare for people who work online, such as web pages, online pathfinders, and tutorials, are useful for much of this population as these are similar to many of the information packages found on the eBay website. What is found at the eBay website, however, that is missing from most libraries and information centers in the online world, are the bulletin boards and chat rooms. Services such as bulletin

boards and chat rooms provide a way for users to receive a service that is slightly more personal than web page links or tutorials that can provide a social network link. At the same time, they allow the user to remain totally impersonal if one wishes.

People who work in an online environment who need an extremely personal touch, however, are left underserved. This is an area where library and information professionals can begin to concentrate their efforts. Not only are people opening businesses online, but all types of education and training at all levels are being offered online. Our world is beginning to move online, and many people must not only deal with the face-to-face aspects of life in the bricks-and-mortar world, but also deal with an online life. Information professionals need to consider serving this population of online workers as well as they serve people operating in the bricks-and-mortar world. The model (Figure 2) presented in this study, a slightly modified version of Taylor's data structure of the information use environment, can serve as a starting point for analysis. This model shows the importance of studying, not only individual information seekers in isolation, but the individual information seeker within the context she is operating when information is sought.

Recommendations for Further Study

Because many entrepreneurs come to entrepreneurship from a variety of backgrounds, they are a rather difficult population to study. Consequently, this set of people provides an interesting challenge for the

provision of information services. Expanding the research to include entrepreneurs dealing with other online auctions and other specialty items should be undertaken. Working with organizational socialization theory as a framework would be another approach to these studies. For this reason, it is important to examine eBay entrepreneurs with higher feedback ratings than those participating in this study. An entirely different picture of the information use environment might be revealed by studying eBay entrepreneurs who have more experience in this online environment, as indicated by a higher feedback rating. In addition, more experience in the eBay environment would indicate more experience online, which could also present a different picture of the IUE. The effect of prior knowledge on the IUE might be revealed through an examination of the educational backgrounds and previous work experience of these entrepreneurs. Studies of the information use environments of entrepreneurs operating in a traditional bricks-and-mortar business in a variety of venues could also provide viable data for a series of comparative studies.

Because the majority of the respondents in my study were married women over the age of 40, and prior studies of women and entrepreneurship target "children in the household" as an important determinant in the choice of entrepreneurship, it may be useful to include this variable in future studies.

In addition, it would be useful to study other sets of people working in online environments, such as distance learners, to determine whether parallels exist in the information use environment. Whether it is the nuances of the online context rather than the occupational context that influences information behaviors would, for example, be a useful question. With the growing population of people working and playing in online environments, any data gathered and analyzed in relation to the information behaviors of this population will fill a great need for those interested in designing information services and providing information packages to information age workers.

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APPENDIX A

To:
From: Linda Lillard lillard@libserv.cmsu.edu
Subject: Participation in Study
Cc:
Bcc:
Attached:

You are invited to participate in a research study. The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, eBay, your input is important to this study and will be very much appreciated.

Here is the procedure that my study will follow:

1. You will be asked to read the informed consent document that is a portion of this e-mail and send a reply if you are willing to participate in the study.

2. If you are willing to participate, you will be automatically subscribed to the ebaysell listserv that I have set up specifically for this research project.

3. I will post questions to the listserv to which only those participating in this study can reply. Each of you will be able to read each other's responses to these questions also, as the nature of a focus group interview is to be able to respond to what others in the group are saying about their experience.

4. Ten people will be participating in this focus group interview, each will be eBay sellers.

5. When I have received consent from ten people, I will notify you by e-mail message to the listserv that you have been subscribed and the focus group interviews are about to begin.

Informed Consent Document-Online Focus Group

The School of Library and Information Management at Emporia State University supports the practice of protection for human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that, if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, your input is important to this study and will be very much appreciated.

You are invited to participate in a personal interview/focus group interview that will take place using the electronic medium of a listserv called "ebaysell". The subscription to this listserv is retricted to members that I subscribe, so only the invited participants of the focus group interview will be able to view your comments. The interview will take approximately an hour and a half total of your time over the time period of several days to one week. Your responses will be strictly confidential. The report will not include any indication of your identity. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments. You need not use your real name in these correspondences, and after the interviews are complete, any identifying information will be removed from the correspondence and destroyed before the final report is prepared. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments.

If you have questions at any time regarding this study or the procedures you may contact the researcher, Linda Lillard at lillard@libserv.cmsu.edu or 660-429-1915. If you feel you have not been treated according to the descriptions in this form or you rights in research as a participant have not been honored during the course of this project, you may contact the Emporia State University Institutional Review Board for the Treatment of Human Subjects, Office of Graduate Studies and Research, 1200 Commercial Street, Emporia, KS 66801-5087, (316) 341-5351 or Fax (316) 341-5909.

"I have read the above statement and have been fully advised of the procedures to be used in this project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and possible risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

Please indicate your agreement to participate in this study by replying to this message and keying in the

statement: "I agree to participate in this study" followed by your name and the date.

APPENDIX B

To:
From: Linda Lillard lillard@libserv.cmsu.edu
Subject: Help a Fellow eBay Seller
Cc:
Bcc:
Attached:

Hello Fellow eBay Seller!

My name is Linda Lillard and I would like to ask for your assistance to me as a fellow eBay seller who deals mostly in glass. My user ID is lillardl@iland.net and my feedback rating is 563.

I have not been able to do much selling recently as I am trying to complete my doctoral dissertation in library and information management. A few days ago I sent you a request to participate in a research study. The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, eBay, your input is important to this study and will be very much appreciated.

What would happen is that I would ask you and nine other people to be a member of a focus group. What this involves is that I would ask you all a series of questions via e-mail to which you would respond via e-mail. You will also be able to read the responses of the other nine group members, so basically this would end up to be a conversation between group members about information use in an online environment in response to my questions.

This really won't take much time...maybe about 10 minutes a day over the period of about a week...just enough time to respond to e-mail questions and conversation. You may also find this conversation extremely interesting, as all other participants will also be eBay sellers in glass categories.

If you are willing to participate, please reply to this e-mail and I will again send you what is called an informed consent form in which you agree to participate in my research study. Again, I would truly appreciate your assistance to a fellow eBayer.

I very much look forward to hearing from you soon!

Linda Lillard
Linda L. Lillard, Assistant Professor
Chair, Department of Library Science
Central Missouri State University
James C. Kirkpatrick Library
Room 1460
Warrensburg, MO 64093
lillard@libserv.cmsu.edu
660-543-8633

APPENDIX C

Subject:
    NOTICE: eBay Information Alert - Sending Spam - lillardl@iland.net
Date:
    Mon, 23 Jul 2001 16:05:23 PDT
From:
    safeharbor@ebay.com
  To:
    lillardl@iland.net

Dear lillardl@iland.net (lillardl@iland.net),

Recently we became aware your eBay registered account was involved in the following activity:

* Sending Spam - Spam is the sending of unsolicited, commercial email including unwanted email to past bidders.

which is not permitted at eBay.

We realize you may not have been aware that there was a rule against this activity. Therefore, we would like to take this opportunity to invite you to review our site policies, which can be found at:

http://pages.ebay.com/help/community/investigates.html#misc

Please understand our goal is to help you understand our policies to ensure successful experiences at eBay. Therefore, we respectfully request that you
refrain from this activity in the future to avoid the possibility of a suspension of your eBay registration.

Thank you in advance for your cooperation in this important matter.

Regards,

Mari L. (safeharbor@ebay.com)

APPENDIX D

5. Your Use of Other Users' Information.

In order to facilitate interaction among all eBay community members, our service allows you limited access other users' contact information. As a seller you have access to the User ID, email address and other contact information of the buyer or winning bidder(s), and as a buyer or winning bidder you have access to the User ID, email address and other contact information of the seller.

By entering into our User Agreement, you agree that, with respect to other users' personally identifiable information that you obtain through the Site or through an eBay-related communication or eBay-facilitated transaction, eBay hereby grants to you a license to use such information only for: (a) eBay-related communications that are not unsolicited commercial messages, (b) using services offered through eBay (e.g. escrow, insurance, shipping and fraud complaints), and (c) any other purpose that such user expressly agrees to after adequate disclosure of the purpose(s). In all cases, you must give users an opportunity to remove themselves from your database and a chance to review what information you have collected about them. In addition, under no circumstances, except as defined in this Section, can you disclose personally identifiable information about another user to any third party without our consent and the consent of such other user after adequate disclosure. Note that law enforcement personnel, VeRO program participants, and other rights holders are given different rights with respect to information they access.

eBay and our users do not tolerate spam. Therefore, without limiting the foregoing, you are not licensed to add an eBay user, even a user who has purchased an item from you, to your mail list (email or physical mail) without their express consent after adequate disclosure. To report eBay related spam to eBay, please send an email to spam@ebay.com

From: eBay Privacy Policy. [Online] Available:
http://pages.ebay.com/help/community/png-priv.html#5

APPENDIX E

Subject: Re: NOTICE: eBay Information Alert - Sending Spam - lillardl@iland.net
Date: Sun, 05 Aug 2001 18:56:18 -0500
From: "L. Lillard" <lillardl@iland.net>
To: safeharbor@ebay.com
References: 1

Dear eBay,

I would like to respond to the message you sent me below in which you
accused me of sending Spam. I would never Spam anybody. I am working
on my doctoral dissertation regarding information use of people working
in online environments. As a LONG time member and seller on eBay, I
thought I would like to question my fellow workers as to how they use
information in their work online. I did random sampling of people
selling in the glass categories, specifically Fire King, Fenton, and
Depression...my own specialties. I contacted these people according to
the rules I found on the eBay website regarding using others contact
information.

I read the eBay Privacy Policy at
http://pages.ebay.com/help/community/png-priv.html#5 (and text included
below) and determined that my project fit item "c" below: (c) any other
purpose that such user expressly agrees to after adequate disclosure of
the purpose(s). In all cases, you must give users an opportunity to
remove themselves from your database and a chance to review what
information you have collected about them.

I expressly told each person what I was doing, asked them if they would
be willing to participate, and only when they agreed, did I send them
any further items. So, what I am asking is for you to explain to me why
this is not allowable, since I read the criteria and did things
according to the letter of your laws regarding privacy and use of other
people's contact information.

I would like to continue on with this study very much and hope that you
would extend me this courtesy as a long time eBay seller in good
standing. I am pasting below the original message I sent out to people
and then below that I will paste the informed consent document I send
them. This is all on the up and up and is not spamming in any way.
There is no commercial gain from any of this. It is a scholarly work of
research. I would appreciate your consideration in this matter and
would love to hear back from you very soon (hopefully in the positive)
so that I can continue on with my research.

E-mail Message to Sellers:

Hello Fellow eBay Seller!

My name is Linda Lillard and I would like to ask for your assistance to
me as a fellow eBay seller who deals mostly in glass. My user ID is
lillardl@iland.net and my feedback rating is 563.

I have not been able to do much selling recently as I am trying to
complete my doctoral dissertation in library and information
management. A few days ago I sent you a request to participate in a
research study. The purpose of this study is to gather data that will
assist in designing and providing information resources for people
working in online environments. Since you are working in an online
environment, eBay, your input is important to this study and will be
very much appreciated.

What would happen is that I would ask you and nine other people to be a
member of a focus group. What this involves is that I would ask you all
a series of questions via e-mail to which you would respond via e-mail.
You will also be able to read the responses of the other nine group
members, so basically this would end up to be a conversation between
group members about information use in an online environment in response
to my questions.

This really won't take much time...maybe about 10 minutes a day over the
period of about a week...just enough time to respond to e-mail questions
and conversation. You may also find this conversation extremely
interesting, as all other participants will also be eBay sellers in
glass categories.

If you are willing to participate, please reply to this e-mail and I
will again send you what is called an informed consent form in which you
agree to participate in my research study. Again, I would truly
appreciate your assistance to a fellow eBayer.

I very much look forward to hearing from you soon!

Linda Lillard

When I received a return message from people indicating that they would
participate, then I sent them the document below:

Informed Consent Document-Online Focus Group

The School of Library and Information Management at Emporia State University supports the practice of protection for human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that, if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, your input is important to this study and will be very much appreciated.

You are invited to participate in a personal interview/focus group interview that will take place using the electronic medium of a listserv called "ebaysell". The subscription to this listserv is retricted to members that I subscribe, so only the invited participants of the focus group interview will be able to view your comments. The interview will take approximately an hour total of your time, about ten minutes per day, over the time period of several days to one week. Your responses will be strictly confidential. The report will not include any indication of your identity. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments. You need not use your real name in these correspondences, and after the interviews are complete, any identifying information will be removed from the correspondence and destroyed before the final report is prepared. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments.

If you have questions at any time regarding this study or the procedures you may contact the researcher, Linda Lillard at lillard@libserv.cmsu.edu or 660-429-1915. If you feel you have not been treated according to the descriptions in this form or you rights in research as a participant have not been honored during the course of this project, you may contact the Emporia State University Institutional Review Board for the Treatment of Human Subjects, Office of Graduate Studies and Research, 1200 Commercial Street, Emporia, KS 66801-5087, (316) 341-5351 or Fax (316) 341-5909.

"I have read the above statement and have been fully advised of the procedures to be used in this project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and

possible risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

Please indicate your agreement to participate in this study by replying to this message and keying in the statement: "I agree to participate in this study" followed by your name and the date.

I look forward to hearing from you and I hope we can work this out in a positive manner. eBay users are great people and I am very grateful to those who have agreed to participate so far. I really feel bad that at least one seller felt that I was spamming him/her with my request. My research is an attempt to help all people who work in an online environment.

Linda Lillard
Registered: Harold Lillard (my husband, we both sell)
lillardl@iland.net   Feedback Rating: 563

APPENDIX F

Subject: Re: NOTICE: eBay Information Alert - Sending Spam - lillardl@iland.net
(KMM32989236C0KM)
Date: Mon, 06 Aug 2001 12:03:41 -0700
From: eBay Safe Harbor <SafeHarbor@eBay.com>
To: "L. Lillard" <lillardl@iland.net>

Hello Linda,

Thank you for writing back for clarification regarding the informational
alert that was sent to you. I am glad to be able to assist you with
this matter.

Please remember that the current alert you received was only sent as a
reminder of our policy, and does not affect your account privileges in
any way.

Spam is considered as any email of a commercial nature sent to email
accounts from which specific permission has not been given to send such
information.

This includes those who are not members of eBay, eBay users who may have
bid on your past auctions or on others' auction items similar to yours.
This also includes using the "Send this auction to a friend" option to
send advertisements of auctions to users you do not know. Though some
users do not mind receiving such email, others send reports of this type
of "spam" every day. Once we receive these reports, we send out notices
explaining this policy to the seller to avoid confusion in the future.

Please allow me to go into detail of the alert, and offer some possible
solutions to avoid this violation in the future.

If you want to send emails to members, sending email to others, one at a
time, asking their permission to put them on your mailing list, is
acceptable as long as each email is:

1. Free of any links - This includes links to eBay or to your personal
website.
2. Free of pricing specifics or generalizations - this includes
comparisons or "less than" quotes.
3. Free of item listings - this includes your giving your user ID, your
auction number and particularly any clickable link to your eBay auction
page.
4. Sent one at a time, with the option to be added to your list (and not

with the option to be removed).

I hope this addresses your concerns, and that you enjoy your use of eBay. Thank you for being a part of the eBay community. It was a pleasure to assist you today!

Regards,

Kimberly G.
eBay Customer Support

_____

eBay
Your Personal Trading Community (tm)

****
For our latest announcements, please check:

http://www2.ebay.com/aw/announce.shtml

In order to better serve you, we'd like to occasionally request feedback on our service. If you would rather not participate, please click on the link below and send us an email with the word "REMOVE" in the subject line. If that does not work, please send an email to the email address below. Your request will be processed within 5 days.

mailto:cssremove@ebay.com

****

12752877
8/6/01

APPENDIX G

To:
From: Linda Lillard lillard@libserv.cmsu.edu
Subject: Help a Fellow Online Auction Seller
Cc:
Bcc:
Attached:

Hello Fellow Online Auction Seller!

This message is not SPAM as it is not commercial in any way. My name is Linda Lillard and I am working on my doctorate degree at Emporia State University. I would like to ask for your assistance to me as a fellow online auction seller who deals mostly in glass.

I have not been able to do much selling recently as I am trying to complete my doctoral dissertation in library and information management. I am asking your permission to include you in my research study. The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online auction environment, your input is important to this study and will be very much appreciated.

What would happen is that I would ask you a series of questions via e-mail to which you would respond via e-mail. This really won't take much time...maybe about 10 minutes a day over the period of about a week...just enough time to respond to e-mail questions.

If you are willing to participate, please reply to this e-mail and I will again send you what is called an informed consent form in which you agree to participate in my research study. Again, I would truly appreciate your assistance to a fellow online auction seller.

I very much look forward to hearing from you soon!

Linda Lillard
Linda L. Lillard, Assistant Professor
Chair, Department of Library Science
Central Missouri State University
James C. Kirkpatrick Library
Room 1460
Warrensburg, MO 64093
lillard@libserv.cmsu.edu
660-543-8633

APPENDIX H

Focus Group Protocol

Participants will be given a form to gather the background information below:
Background Information

Demographic Variables (help to define information environment and behavior of a restricted population):

Age:
Under 18 ___   19-25____   26-39____   40-54____   55+____

Sex:
M____   F____

Current Marital Status: Single, never married____   Single, separated, divorced, or widowed _____ Married____

Race/ethnicity:
White, not of Hispanic origin____   Black, not of Hispanic origin ____   Hispanic ____
Asian or Pacific Islander ____   American Indian or Alaskan Native ____
Education: Choose highest level of education attained:

High School____ AA Degree____ BA/BS Degree____ MA/MS Degree____
PhD/EdD Degree_____ Other_____.

Could you tell me a little about your attitude toward the following:

Trying something new that has no assurance of success that involves some sort of uncertainty – time, money?
Trying out a new idea, method or device?
(new ways of accomplishing a task especially using technical processes, methods, or knowledge, for example...computer...scanner...digital camera, etc)
Learning?

■■

Preliminaries:
Introductions

Today we are meeting together to talk about working in an online environment and information seeking. I have some questions to ask you, and I am anxious to hear about your experience working online. There are no right or wrong answers to the questions I am going to ask and I really want to know what you think.

I n order to provide everyone with a chance to talk, I would like you to take turns talking. I am going to be taping our talk today, because that I won't have to take so many notes and I can really listen to what you have to say. The tape will not be heard by anyone outside of this group—it's purpose will just be to help me remember our conversations.

So that we are all comfortable talking with each other, let's go around the circle and introduce ourselves. Give your name and how long you've been dealing in glass and how long you've been selling that glass on eBay.

Think back to when you first found out about eBay. Can you describe your experience as ebay novices, particularly that period of time when you first became interested in selling on eBay? When was that?

> Probes:
> How did you first hear about eBay?
> What influenced your decision to start selling on eBay?
> Can you elaborate on what you have said--tell me more about that aspect?

Could you describe your role as an eBay seller? In other words, in terms of a job description, what do you actually do as an eBay seller? What activities?

> Probes:
> Salesperson
> Packer/shipper
> Accountant

What are some of your typical activities during a week as an eBay seller?

Did you encounter any problems when you decided to get involved in eBay buying and selling? Can you talk about them? What did you need to do to get past them?

What did you need to know as a beginning eBay seller and how did you find out?

> Probes:
> Finding items to sell?
> Understanding how to sell on eBay?
> Understanding how the online auction worked?
> How to get pictures of your items?
> How to display pictures of your items?
> How to get paid for your items?
> How to did you handle payment/finances?
> How to package the item?
> How to ship the item?
> How to estimate the cost of shipping for the customer?

How did you find the information to overcome these problems?

As an experienced eBay seller, do you still have issues and problems, and if so, what do they involve?

> Probes:
> Finding suppliers—business supplies/items to sell.
> Knowing what your items are worth.
> Identifying items.
> Finding more items to sell.
> Bookkeeping
> Taxes

How do you find the information to overcome these problems?

Are you a full-time entrepreneur/eBay seller, or do you have another job? If so, what is that job?

If you are a full-time entrepreneur/eBay seller, do you have employees?

If you were to advise someone who is thinking about becoming an eBay seller, what would you tell him or her?

APPENDIX I

Interview Questions

Background Information

Demographic Variables (help to define information environment and behavior of a restricted population):

Age:
Under 18 ___ 19-25 ___ 26-39 ___ 40-54 ___ 55+ ___

Sex:
M ___ F ___

Current Marital Status: Single, never married ___
Single, separated, divorced, or widowed ___ Married ___

Race/ethnicity:
White, not of Hispanic origin ___ Black, not of Hispanic origin ___ Hispanic ___
Asian or Pacific Islander ___ American Indian or Alaskan Native ___
Education: Choose highest level of education attained:

High School ___ AA Degree ___ BA/BS Degree ___ MA/MS Degree ___
PhD/EdD Degree ___ Other _____.

Could you tell me a little about your attitude toward the following:

Risk-taking (trying something new that has no assurance of success that involves some sort of risk – time, money)
Innovation (trying out a new idea, method or device)
New Technology (new ways of accomplishing a task especially using technical processes, methods, or knowledge, for example...computer...scanner...digital camera, etc)
Education

Think back to when you first found out about online auctions. Can you describe your experience in entrepreneurship, particularly that period of time when you first became interested in selling online? When was that?

> Probes:
> How did you first hear about online auctions?
> What influenced your decision to start selling on an online auction?
> Can you elaborate on what you have said--tell me more about that aspect?

Could you describe your role as an online auction seller? In other words, in terms of a job description, what do you actually do as an online auction seller? What activities?

> Probes:
> Salesperson
> Packer/shipper
> Accountant

What are some of your typical activities during a week as an online auction seller?

Did you encounter any problems when you decided to get involved in online auction buying and selling? Can you talk about them? What did you need to do to get past them?

What did you need to know as a beginning online auction seller and how did you find out?

> Probes:
> Finding items to sell?
> Understanding how to sell on eBay?
> Understanding how the online auction worked?
> How to get pictures of your items?
> How to display pictures of your items?
> How to get paid for your items?
> How to did you handle payment/finances?
> How to package the item?
> How to ship the item?
> How to estimate the cost of shipping for the customer?

As an experienced online auction seller, do you still have issues and problems, and if so, what do they involve?

> Probes:
> Finding suppliers—business supplies/items to sell.
> Knowing what your items are worth.
> Identifying items.
> Finding more items to sell.
> Bookkeeping
> Taxes

How do you find the information to overcome these problems?

Are you a full-time entrepreneur/online auction seller, or do you have another job? If so, what is that job?

If you are a full-time entrepreneur/online auction seller, do you have employees?

If you were to advise someone who is thinking about becoming an online auction seller, what would you tell him or her?

APPENDIX J

EMPORIA STATE UNIVERSITY

APPLICATION FOR APPROVAL TO USE HUMAN SUBJECTS

This application should be submitted, along with the Informed Consent Document, to the Institutional Review Board for Treatment of Human Subjects, Research and Grants Center, Plumb Hall 313F, Campus Box 4003.

1. Name of Principal Investigator(s) (Individual(s) administering the procedures):

        Linda L. Lillard

2. Departmental Affiliation: School of Library and Information Management

3. Person to whom notification should be sent: _____ Linda L. Lillard _____

Address: 502 Quail Trail, Warrensburg, MO 64093 ___ Telephone: 660-429-1915 _____

4. Title of Project: INFORMATION SEEKING IN CONTEXT: AN EXPLORATORY STUDY OF INFORMATION USE ONLINE BY EBAY ENTREPRENUERS

5. Funding Agency (if applicable):

        n/a

6. Project Purpose(s):

The purpose of this project is to study the role of information in the decision-making process of entrepreneurs doing business online, in this case specifically those doing business on the eBay Auction website. This projects also seeks to identify the information sources this population finds useful and valuable in addition to determining what formats of information they have found to be most useful. The results of this study may contribute to a better understanding of how people operating in the online eBay auction environment , choose which information resources to use, and what impacts these choices. This understanding may have considerable impact on information professionals who are concerned with the design and development of information resources for online entrepreneurs in other venues, bricks-and-mortar entrepreneurs, people operating in online environments in general, distance education students and others seeking information online.

7. Describe the proposed subjects: (age, sex, race, or other special characteristics,

such as students in a specific class, etc.)

Subjects may be any age, sex, race, or may even be students. Subjects are all sellers on the online eBay auction. 30 people will be interviewed and approximately 30 additional people will be members of 3 focus groups.

8. Describe how the subjects are to be selected:

Purposive sampling will be used to determine participants for the in-depth interviews and the online focus groups. Subjects will all be sellers at the eBay online auction website and will be chosen from those selling in the antique glass, Fenton glass, Fire King glass, and Depression glass categories to reflect the expertise of this investigator. Only sellers who have high feedback ratings (over 500) which is indicative of long-term involvement with eBay and those who have low feedback ratings (under 100) which is indicative of recent entry to the selling arena. Participants for the face-to-face focus group will be selected utilizing snowball or referential sampling. In the utilization of snowball sampling, the staff at a local antique mall will be asked to identify potential focus group participants from the booth owners in their mall who they know sell glass and also sell that glass on eBay. Those identified will also be asked to identify others they know who sell glass on eBay. This will go on until the names identified are those that have already been identified, thus this identification has come full circle (Krathwohl, 1998).

9. Describe the proposed procedures in the project. Any proposed experimental activities that are included in evaluation, research, development, demonstration, instruction, study, treatments, debriefing, questionnaires, and similar projects must be described here. Copies of questionnaires, survey instruments, or tests should be attached. (Use additional page if necessary.)

As all participants are people who work in online environments and many will be located at a distances from the researcher, data will be gathered via online interviews as well as in face-to-face focus group interviews. Data will also include online documents avaialable to study respondents on the eBay website. Procedures for data collection in the proposed study include document analysis, in-depth interviews, and focus group

interviews. For the document analysis, one data set will consist of all issues of the electronic newsletter, eBay Insider, archived on the website from January 1999-January 2000. A second data set will consist of postings to online help boards at the eBay website in addition to the information presented at the library area of the eBay website.

The researcher intends to interview 30 participants and plans to set up a password-protected online environment such as *CourseInfo*. In this way, participants can be assured that their responses will be fully confidential and not open to view by others online. *CourseInfo* allows for discussion board postings and real-time engagement in the virtual classroom chat area. Respondents can choose whichever method they prefer. For example, if respondents do not have a block of time to devote, they can respond when convenient on the discussion board. One participant will be interviewed at a time, and those responses removed from *CourseInfo* before another participant is interviewed. Three semi-structured focus group sessions will be conducted, two online and one in the face-to-face venue. A copy of the questions to be used for the interviews and focus groups is attached. No experimental methods will be employed.

10. Will questionnaires, tests, or related research instruments not explained in question #9 be used?

_____Yes __X_No (If yes, attach a copy to this application.)

11. Will electrical or mechanical devices be used?   _____Yes __X___No (If yes, attach a detailed description of the device(s).)

12. Do the benefits of the research outweigh the risks to human subjects?

___X__Yes _____No (if no, this information should be outlined here.)

13. Are there any possible emergencies which might arise in utilization of human subjects in this project?
_____ Yes___X__No Details of these emergencies should be provided here.

14. What provisions will you take for keeping research data private?

The researcher does not want to know the real names of study participants. Participants will be identified by eBay user name, which will not be associated with subjects' real names and addresses. While this information is available to the researcher as a registered member of eBay, the researcher will not request this information .

The research approach to be taken in this project is qualitative and exploratory, not experimental. Any information collected on or from individuals will be coded; any audiotaped focus group interviews will be transcribed and coded. Audiotapes will be destroyed once they have been transcribed.

15. Attach a copy of the informed consent document, as it will be used for your

subjects.

STATEMENT OF AGREEMENT: I have acquainted myself with the Federal Regulations and University policy regarding the use of human subjects in research and related activities and will conduct this project in accordance with those requirements. Any changes in procedures will be cleared through the Institutional Review Board for Treatment of Human Subjects.

_____   _____

Signature of Principal Investigator   Date

_____   _____

Faculty advisor/instructor on project (if applicable)   Date

APPENDIX K

Informed Consent Document—Online Focus Group

The School of Library and Information Management at Emporia State University supports the practice of protection for human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that, if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, your input is important to this study and will be very much appreciated.

You are invited to participate in a personal interview/focus group interview that will take place using the electronic medium of a listserv called "ebaysell". The subscription to this listserv is retricted to members that I subscribe, so only the invited participants of the focus group interview will be able to view your comments. The interview will take approximately an hour and a half total of your time over the time period of several days to one week. Your responses will be strictly confidential. The report will not include any indication of your identity. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments. You need not use your real name in these correspondences, and after the interviews are complete, any identifying information will be removed from the correspondence and destroyed before the final report is prepared. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments.

If you have questions at any time regarding this study or the procedures you may contact the researcher, Linda Lillard at lillard@libserv.cmsu.edu or 660-429-1915. If you feel you have not been treated according to the descriptions in this form or you rights in research as a participant have not been honored during the course of this project, you may contact the Emporia State University Institutional Review Board for the Treatment of Human Subjects, Office of Graduate Studies and Research, 1200 Commercial Street, Emporia, KS 66801-5087, (316) 341-5351 or Fax (316) 341-5909.

"I have read the above statement and have been fully advised of the procedures to be used in this project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and possible risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

Please indicate your agreement to participate in this study by replying to this message and keying in the statement: "I agree to participate in this study" followed by your name and the date.

APPENDIX L

Informed Consent Document—Online Interview

The School of Library and Information Management at Emporia State University supports the practice of protection for human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

The purpose of this study is to gather data that will assist in designing and providing information resources for people working in online environments. Since you are working in an online environment, your input is important to this study and will be very much appreciated.

You are invited to participate in a personal interview that will take place using the electronic medium of e-mail for the researcher. The interview will take approximately ten minutes a day over the time period of a week. Your responses will be strictly confidential. The report will not include any indication of your identity. The only record of your name as a respondent for this study will be this informed consent document; your name will not appear in association with your particular comments.

You need not use your real name in these correspondences, and after the interviews are complete, any identifying information will be removed from the correspondence and destroyed before the final report is prepared. The only place your name will show up is on this informed consent document, which will in no way be associated with your particular comments.

If you have questions at any time regarding this study or the procedures you may contact the researcher, Linda Lillard at lillard@libserv.cmsu.edu or 660-429-1915. If you feel you have not been treated according to the descriptions in this form or you rights in research as a participant have not been honored during the course of this project, you may contact the Emporia State University Institutional Review Board for the Treatment of Human Subjects, Office of Graduate Studies and Research, 1200 Commercial Street, Emporia, KS 66801-5087, (316) 341-5351 or Fax (316) 341-5909

"I have read the above statement and have been fully advised of the procedures to be used in this project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and possible risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

Please indicate your agreement to participate in this study by replying to this message and keying in the statement: "I agree to participate in this study" followed by your name and the date.

I, <u>Linda L. Lillard</u>, hereby submit this dissertation to Emporia State University as partial fulfillment of the requirements for a doctoral degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

_____
Signature of the Author

_____
Date

<u>Information Seeking in Context:</u>
<u>An Exploratory Study of Information</u>
<u>Seeking Online by eBay Entrepreneurs</u>

_____
Graduate Office Staff Member

_____
Date Received