## The Making of a Modern Market: eBay.com

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## Chapter 1

## The Search for the Perfect Market

Over Labor Day weekend in 1995, Pierre Omidyar, eBay's founder, created an economist's dream—the perfect market. The perfect market would use an emerging technology to create a marketplace where individual buyers and sellers would "meet" to exchange goods without outside interference. Omidyar used the expansive network possibilities of the Internet and the auction format to create a real world test case of the prototypical economic model of a market. Omidyar's vision stemmed from his Libertarian philosophy and his practical experience working in Silicon Valley where he witnessed people profiting from inside information gleaned from personal and professional networks, a practice he despised (Cohen 2002). By connecting individuals to individuals, AuctionWeb—the initial name for the site—would not rely on selling from a centralized source. Users would operate on a level playing field with equal access to information on price and product for buyers. Sellers would have an equal opportunity to sell their products regardless of their size or assets. Buyers and sellers would engage in exchange through an auction format that would yield the perfect price—the exact point where supply meets demand. The classical, general equilibrium model of a market in economic theory is one in which anonymous, rational, individual buyers and sellers exchange goods with perfect information in a bazaar type setting. If there is any real market where this model should have held true, it was eBay.

AuctionWeb is now eBay.com, the largest e-commerce site in the world. The eBay.com marketplace platform that Omidyar created is open 24 hours a day, seven days a week, and appears on localized sites in 24 countries. EBay is the leading e-commerce site in eight of the top ten markets— the U.S, Germany, the United Kingdom, South Korea, Australia, France, Italy, and Canada. EBay users successfully closed auctions totaling nearly US\$60 billion in 2007 in gross merchandise value (GMV). According to the company's June 2008 quarterly report, there are over 84.5 million active users. Bay's 2007 GMV would place it in the top one third of countries in terms of national GDP. The 84.5 million active users in the marketplace is greater than the population of all but 15 countries in the world, just ahead of Germany and far above the populations of France, and the United Kingdom. The number of people using eBay is more than ten times the number that read the USA Today, The Wall Street Journal, and the New York Times combined. EBay.com is the 8<sup>th</sup> most visited website in the United States behind only popular search engines Google and Yahool, the videosharing site YouTube, and social networking sites MySpace and Facebook.

What explains this enormous growth and popularity? Had Omidyar truly unlocked the door to the perfect market? I argue that eBay's ultimate success relied less in its relation to the neoclassical model of the perfect market and more on the ability of market makers and designers to address two sets of problems: first solving the technical problems of reducing risk and uncertainty of one-time exchanges between buyer and seller; and the second dealing with managing a complex, diverse, and growing group of sellers and buyers with often incongruous interests. In this version, the story of eBay's founding and emergence is, at its core, the story of how social relations between economic actors produce the institutions that structure the marketplace. It is at once a story about

<sup>1</sup> Active users are defined as users who have bid on, bought, or listed an item in the past 12 months; users may register more than once and therefore have more than one account.

technological and social innovation—the meeting of a technology, the social dynamics of markets, and ideas about the appropriate role of governance, competition, fair exchange.

The sociological literature has demonstrated not just that the very premises of the classical economic model have social origins, but also that the construction of markets themselves is a political and social project, no different from other areas of social life. That markets are at their core social institutions is now a foregone conclusion not just in sociology but also in contemporary research in economics. The more pertinent question is in what ways, for what reasons, and under what conditions do people construct markets and develop innovations? The question that I address here is why and how eBay evolved from a loosely organized and minimally structured marketplace into a complex set of institutions governing one of the largest online retail sites in the world. I use economic and sociological theories about market and market structure as points of inquiry into an empirical case of market development and evolution. By examining market formation as a social process, the sociological approach raises the question of how actors—individuals, organizations, associations, etc.—are constituted in markets. If all markets are formed through social relations and require institutions, then what explains the types of institutions created in any given market?

The answer to these questions is important for substantive and theoretical reasons. Substantively, the Internet has paved the way for an increasing number of global, impersonal markets where individuals exchange goods and services with people often in one-time exchanges. The most successful of these marketplaces have grown exponentially since that time and raise the question of what types of continued intervention underlay this market growth. EBay is the major success of story of what is now known as Web 1.0 and its invocation of community is the heart of the current Web 2.0 generation of Internet entrepreneurship. The perfect market story is only partial, not just in the foundational sense, but also because it obfuscates the management of social relations and social experimentation that actually occur in real markets. EBay's success depended on its ability to solve practical business problems. EBay executives discovered impediments to market growth and tried to solve the issue of trust and uncertainty in relationships. The vision of a free, self-regulating market quickly faded as their attempt to build an online market confronted a number of challenges.

Theoretically, the study of eBay as a market in practice (Kollock and Braziel 2006) allows for a sharpening of our understanding of the central mechanisms through which people and organizations construct markets. Sociologists have pointed to the importance of social relations whether understood as networks (Granovetter 1985), political battles over the rules of the game (Bourdieu 1984; Bourdieu and Wacquant 1992; Dobbin 1994; Fligstein 1991, 1996), or more micro interactions between market actors (Kollock 1994, 1999; Yamagishi, Cook, and Watabe 1998). Market makers in each instance confront problems of trust, resource dependence, competition, information, and political alliances. The sociology of markets has generated three avenues of inquiry into how market actors understand and respond to these more general problems of markets: markets as networks, markets as institutions, and markets as performance. Collectively, these perspectives offer an analytical lens through which to understand how markets develop and where and when networks, institutions, and performativity matter. They constitute a toolkit for unpacking the eBay story.

My starting premise is that variations in market strategies and structures depend on variations in what perceived problems in markets actors are trying to solve, preexisting cultural understandings, and what relationship in which the problem arises (buyer-seller, competition between sellers, or relationships between market actors and larger regulatory agents/the state (in this case eBay). Of necessity, the performative nature of markets reveals itself by looking at what logics, models, and tools actors are using when determining their strategies. Buyer-seller relationships

manifest themselves on eBay through the need to manage the risk and uncertainty of exchange. The relationship between sellers has two components; on the one hand sellers are trying to mediate competition in order to ensure stability and on the other hand they collaborate (particularly in new markets) in sharing resources, information, knowledge, and organizing for or against market rules and structures. EBay also sits within the larger field of eCommerce, as such shifts in market formats and rules reflect a capitalist firm striving to diversify its products.

I proceed by looking at the theoretical approaches in economics and in the sociology of markets to understanding the fundamental problems of market construction and the mechanisms through which these problems are resolved. I then provide a theoretically informed narrative of eBay's evolution from a minimally structured marketplace to a complex web of social relations and market rules.

## Towards a More Integrated Sociology of Markets

Scholars have begun creating a serious analysis of what types of institutions stable economic markets require and how these institutions emerge and evolve (Abolafia 1996, 2001; Callon 1998; Dobbin 2004; Fligstein 1996, 2001; Granovetter 1985; Hodgson 2002; North 1990; Stiglitz 2000, 2002; Zelizer 2002).<sup>2</sup> These efforts have produced important insights into the role that social networks, institutions, and economic ideas play in solving problems of market construction such as dealing with risk and uncertainty, maintaining a stable and predictable market environment, and managing competition between market actors. The flourishing of the sociology of markets has emanated from different theoretical premises and empirical settings; consequently these theories often present similar arguments without directly engaging one another due to the use of different terms and concepts. Part of the reason for this disjuncture is through the subject of empirical analysis—often limited to market competitors; producer-client, producer-consumer, market actors and the state. All of these relationships are important to the functioning and social structuring of markets although it is not always clear in what ways.

This study is an attempt to begin fitting these competing versions of the sociology of markets together. I will briefly outline three broad approaches to the importance and function of institutions in markets—institutional economics and the important subset of transaction cost economics, the economics of information, and the sociology of markets. Within the sociology of markets, I examine three different approaches: scholars that see markets as networks, those that see markets as institutions, and those who emphasize the performativity of markets. These approaches provide a set of analytical tools with which to investigate the evolution of eBay. My intent is not to adjudicate between economic theories and sociological theories on market formation. Rather, I intend to use these theories as points of inquiry into an empirical case of market development and evolution. The literature is not always clear in examining under what conditions or what settings each set of mechanisms catalyze market growth. I advance the idea that networks and institutions are interrelated—in some instances networks are the source of perceptions, ideas, and innovations that produce institutional change and in others networks are a response to changes in the institutional environment. I also raise the issue that networks and institutions can be seen as alternative ways of governing markets—each more applicable in some situations then others. Lastly, while it is clear that market makers and designers are at times clearly operating with specific models

<sup>2</sup> See for example the edited volumes Advancing Socio-Economics: An Institutionalist Perspective, The New Economic Sociology, and The Handbook of Economic Sociology.

and theories about how markets *should* work, the outcomes and effectiveness of these models in practice is not always clear.

The above approaches share five broad understandings of markets. First, they are based on the premise that actors in markets want to solve certain problems in order to reduce uncertainty, increase cooperation, and provide stable, predictable environments for exchange. Second, they agree that markets consist of formal and informal rules that shape and constrain actors. Third, institutional economics and the economics of information acknowledge the general sociological insight that markets have historical, structural, and institutional character. Fourth, how actors use, acquire, and understand knowledge depends on contingent and specific local cultural knowledge and is of central importance in explaining the dynamics of a market. This last point, while discussed in theory in institutional economics and the economics of information remains largely unexplored empirically. Differences between the above approaches stem largely from their assumptions about social action, a different analysis about the mechanisms through which social action leads to social structures in markets, and the subject of their empirical gaze. Institutional economics and the economics of information assume that actors are boundedly rational and opportunistic. Institutional economic theory predicts that, in the long run, rational actors will create social and market institutions that enhance efficiency.<sup>3</sup> The economics of information argues that social structures either help actors deal with imperfect information or are attempts to preserve and information asymmetries (Stiglitz 2000). Consequently, the economics of information suggests an important role for government intervention. The sociology of markets emphasized in this paper views the development of markets as a social process and posits that social structures of markets are attempts to mitigate the effects of competition, reduce risk and uncertainty, and share information and resources. By examining market formation as a social process, the sociological approach raises the question of how actors—individuals, organizations, associations, etc.—are constituted in markets. The focus on markets as social processes also draws attention to the role of power and the development and use of information.

## Institutional Economics and the Economics of Information

Institutions arise to guide the interaction of actors, to provide the rules of the game (North 1990; Fligstein 1991, 1996; DiMaggio and Powell 1991; Bourdieu 1984; Bourdieu and Wacquant 1992; Jepperson 1991). Institutional economics analyzes market dynamics at two levels. The first level, the institutional environment, is a "set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange, and distribution" (Davis and North 1971: 6-7). The second level, the institutional arrangement, concerns institutions of governance between economic actors and which defines how they can compete. Transactions are embedded in the institutional environment, seen as a set of shift parameters, "changes in which elicit shifts in the comparative costs of governance" (Williamson 1993: 457). Actors are assumed to be intendedly rational and opportunistic (Williamson 1993; North 1990).<sup>5</sup>

<sup>3</sup> Certain sociological accounts seem to accept these behavioral assumptions (Baker 1984; Granovetter 1985) and efficiency assumptions (Granovetter 1985; Uzzi 1996).

<sup>4</sup> The metaphor of fields as games explicit in Bourdieu, Fligstein, North, and DiMaggio and Powell is similar to Jepperson's (1991: 143) and North's (1990) view of institutions as constituent rules.

<sup>5</sup> The behavioral assumption of opportunism presumes that individuals are self-interest seeking with guile. Opportunistic behavior results in systematic hazards in markets. The second behavior assumption is also thought of as bounded rationality. Economic agents are intendedly rational, but only limitedly so; actors may not see the "calculus" correctly.

The pre-existing institutional structure affects who and how people organize and what actions are viable. These structures can constrain action and lead to path dependence (Arthur 1988; North 1990; Pierson 1993) or lead to political opportunities (Fligstein 1997; Dimaggio 1991). The approach in institutional economics is that the knowledge, skills, and learning of actors are determined by institutional incentives. The knowledge that people gain over time guided by institutional incentives influences the way they explain and justify their actions (North 1990). Institutional economic theory does not, however, delve deeply into the role and origin of norms and ideas.

In transaction cost economics, the primary role of economic institutions is to economize transaction costs by assigning different types of transactions to governance structures (Williamson 1985, 1991; van Waarden 2002; Coase 1990). These governance structures reduce uncertainty and risk, often through the formation of calculative trust, creating stability and predictability. Individuals can make rational decisions in this context. Contracts under these conditions will include the support of governance structures only in the degree to which these are cost-effective.

The need for governance varies systematically, in cost-effective ways, with institutional environment (Williamson 1993). The treatment of the institutional environment as an exogenous contextual feature of transactions does not address the possibility that actors are directly involved in shaping and challenging the institutional environment. They may be acting opportunistically and those with greater power may win out without producing efficient outcomes. Modeling the institutional environment as exogenous implies that economic actors know and understand the institutional environment without asking how and in what ways they do so.

Similar arguments about the importance of a set institutional framework that actors can use to interpret the market come from experimental economics. Experimental economists acknowledge that the simulation of market phenomena involves an exposition of specific rules and procedures. Lab experiments do not work without the set up of a specific institutional structure (Smith 1982; Holt 1995; Kagel 1995; Starmer 1999).

A second approach within economics, the economics of information, shares the behavioral assumptions of institutional economics that actors are intendedly rational and opportunistic. However, the economics of information argues that imperfect markets result from information uncertainties. The approach posits that markets are places of exchange where information is imperfect, obtaining information is costly, there are important asymmetries of information, and that the actions of firms and individuals affect the extent of information asymmetries (Stiglitz 2000). This work seeks to explain the circumstances in which markets do not work well and how selective government intervention can improve their performance.

<sup>6</sup> This idea is thought of as organizational learning in North (1990, also discussed as adaptive efficiency) and Pierson (1993).

<sup>7</sup> Calculative trust can be seen as a subcategory of risk (Williamson 1993, Guseva and Rona-Tas 2001). Williamson argues that risk and trust should not be treated as interchangeable concepts the way that they often are in the social sciences. Thus, transaction cost economics refers to contractual safeguards, or their absence, instead of trust, or its absence.

<sup>8</sup> Williamson understands governance as transaction specific safeguard. He identifies six features of the institutional environment: societal culture, politics, regulation, professionalization, networks, and corporate culture.

<sup>9 &</sup>quot;The results of market experiments show that experimental markets sometimes converge to predicted outcomes, and sometimes they do not. Part of the difficulty in understanding why such differences exist between alternative market institutions derives from the fact that we have a relatively underdeveloped understanding of what determines initial decisions and the dynamics of adjustment." (Starmer 1999:F13)

Problems associated with information produce two central hazards in markets: adverse selection and moral hazard (Stiglitz 2000). Selection problems arise when economic actors do not possess the necessary information about the reliability, skills, experience, etc. of trading partners. Thus, actors engage in self-selection, signaling processes, and direct expenditures (screening, verification, search) in order to find the best match. Moral hazard is an incentive problem wherein actors try to monitor the behavior of those with whom they have contracts in order to achieve the desired behavior (e.g. insurance companies wanting clients to be risk averse).

The above perspective in the economics of information raises two key questions. First, it requires an understanding of the dynamism of markets—how the economy and individual economic actors adapt to, create, use, and understand new information and knowledge. Second, economic actors recognize the importance of signaling and that how other actors interpret particular actions is a central issue in markets (Stiglitz 2000). This insight, which has not been explored in great empirical depth in the economics literature, raises the issue of how social knowledge and signaling conventions are created and interpreted. The orientation of economic actors to the actions of others and the idea that these actions are interpreted with the use of particular frames of knowledge closely mirrors the dominant view in the sociology of markets (White 1981; Fligstein 1996, 1997, 2002).

Economic theory based on the above arguments would make three broad claims about the social institutions of eBay. First, institutions arise in response to problems of imperfect or incomplete information in order to reduce risk and uncertainty. Second, institutional economic theory argues that the institutions will persevere to the extent that they facilitate efficient outcomes in the long run. Third, the economics of information can be understood partially as a set of prescriptions about what states, in this case eBay, should do to deal with information problems. From this perspective eBay needs to occasionally intercede in the marketplace to create social and market institutions that address the problems associated with adverse selection and moral hazard. These claims in the economics literature provide plausible propositions about why actors want and/or need institutions. Specifically, were company and user decisions about establishing trust and reducing uncertainty; if not, what are other alternatives?

## Markets as Networks, Institutions, and Performance

Whereas the above views start with the premise of bounded/intendedly rational, self-interested actors and orient themselves towards conditions of market failure, sociologists begin from the premise that markets are imperfect social institutions (Fligstein 2001; Guseva and Rona-Tas 2001). Even if market and social institutions are about lowering transaction costs through processes that, for example, establish trust, reduce uncertainty, and adjust for information asymmetries, that still leaves the issue of how these problems are solved in local contexts. Sociological theory provides a set of tools to understand what and how actors view problems in a market, how they attempt and interact to solve these problems, and how these solutions work. Different cultural contexts will have different interpretations, understandings, and tolerances for risk and thus push for different incentives for the reduction in uncertainty and risk (van Waarden 2002). Sociologists studying market institutions have found that there are different types of markets, that a potentially infinite number of alternative institutional features exist, and that markets are highly organized entities that impose

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<sup>10</sup> Adverse selection can also refer to many other types of exchanges like the search by companies for competent employees. Companies are searching for individuals with the necessary skills to complete a job but may not possess all the desired information about a person's experience, character, etc.

rules and benefits upon users (Baker 1984; Abolafia 1996; Fligstein 1996, 2001; Kregel 1995; Garcia 1986).

There are three predominant perspectives with the sociology of markets (Fligstein and Dauter 2007; Fourcade 2007)□. While they often agree on the basic challenges faced by market makers—addressing risk and uncertainty in exchange, mediating competition, and sharing information, knowledge, and resoources – the perspectives differ in how and the mechanisms through which these problems are solved in local contexts. One approach emphasizes the role of social networks (Granovetter 1985; 2006; Uzzi 1996; White 1981, 2002); a second perspective uses focuses on institutions (Dobbin 1994; Fligstein 2001; Powell and DiMaggio 1991); and the third approach highlights performativity (Callon 1998; Callon and Muniesa 2005; MacKenzie and Millo 2003, MacKenzie 2005).

The markets as networks approach posits the importance of networks as a mechanism for the flow and diffusion of information, gaining knowledge and learning, and for fostering cooperation, and trust (Baker 1984; Granovetter 1985; Powell 1990, 2004, 2005; Stuart 1988, Stuart et al. 1999). Studies of networks that look at the vertical relationships in supply chains (Uzzi 1996) or the relationship between producers and their clients (Baker et. al 1998) emphasize their role in providing stability. Uzzi (1996) distinguishes calculative from heuristic behavior, the need for mutual acquaintances to prime relationships, a trial phase characterized by calculative behavior, and cooperation for nonreputational reasons. Networks are also a mechanism for gaining resources, for example, potential investors in the biotech industry closely examine the interorganizational relationships and exchange partners of young companies as a means for assessing their likelihood of succeeding (Stuart 1988, Stuart et al. 1999). Montgomery (1998) extends this analysis to suggest that situations elicit various roles and identities in individuals. The content of these roles is socially constructed. In an earlier study of online markets, Kollock (1999) used eBay as an example of a market that lacked of a formal clearing mechanism and emphasized the role of network based reputation systems as a risk management strategy. This pioneering work demonstrated the vital role of networks for online markets in their infancy. In a second study, Kollock and Braziel (2006) explain the failure of many business-to-business online, anonymous markets on the fact that market designers underestimated the importance of small networks of social relationships between buyers and sellers for solving problems and providing informal insurance.

Unlike other studies emphasizing the role of networks in markets, White (1981, 2002) argues that production markets are hard to sustain with more than a dozen actors due to limits of perception and cognition regarding the actions of a higher number of firms (White 2002: 10).11 In White's model, production markets are governed by networks of producers that situate themselves in a niche based on price and quality relative to one another. Producers impute consumer demand based on the positioning and sales of their competitors under conditions of repetitive transactions and sustained competition.

The empirical focus of the markets as networks approach, essentially by definition, is on markets with relatively stable sets of relationships or potential relationships. Not all markets are equal; networks are difficult to establish and may not explain much of market growth in marketplaces that bring together anonymous buyers and sellers. The focus on producers and sellers in the institutions as networks approach presents a different set of market problems than that of trading markets, which must deal with organizing large numbers of buyers and sellers (Cetina 2004).

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<sup>11</sup> For example, Uzzi's (1996) study of the role of networks among apparel firms is based on an ethnographic study of 23 firms and a quantitative analysis of 479 firms.

Market designers in these markets confront a different set of practical problems, namely how to make buyers and sellers confident that exchange contracts will be upheld.

The institutional perspective on modern production markets argues that markets are characterized by incumbent-challenger relations between producers, that market structures are socially constructed, and that the negotiation of market institutions is designed to mitigate the effects of competition, increase stability, and maintain the privileged position of dominant producers (Fligstein 1996; Hodgson 2002). This conception of markets implies a political dimension where actors seek to define rules and market structure in order to ensure stability. This generates a different set of propositions than the economics literature or the markets as networks approach about how markets will form. For example, the creation of market rules will favor incumbent sellers over challenger sellers and will involve political lobbying. Social institutions do not exist solely to lower transaction costs but also to provide actors with a set of cultural tools to interpret actions within the market. From this perspective, White's (1981) model can be seen as the construction of a signaling mechanism (i.e. how actors read and interpret what other producers are doing and how they choose their niche).

Institutions reduce uncertainty by providing a structure to market interactions (Guseva and Rona-Tas 2001; North 1990; Williamson 1993). Institutions can be formal constraints—specifically devised and codified rules--or the informal constraints of conventions and codes of behavior. Fligstein (1996) posits four such social institutions as necessary preconditions to existence of markets: property rights, governance structures, rules of exchange, and conceptions of control. 12 The rules of exchange define who can transact with whom and the conditions under which transactions are carried out. Market actors must solve the problem of defining legal and illegal forms of competition (Fligstein 1996, 2002). Baker et al. (1998) suggest that network structures in relationships between advertising agencies and their clients constitute the rules of exchange; the precise nature of these relationships, the rules of exchange, can change over time – in this case from fixed-prices to exclusivity, to loyalty. These market institutions are politically contested and establish the boundaries for market operation—what actions are possible and how other actors will interpret those actions. A conception of control refers to a worldview that allows actors to interpret the actions of others and a reflection of how the market is structured (Fligstein 1996, Hodgson 2002). Cultural differences lead to a different understanding of the same market (i.e. corporate culture, cooperation with competitors—cartels, price controls, barriers to entry, limiting production, patents, licensing agreements). Numerous studies demonstrate how locally specific constellations of actors and institutions shape and constrain the structure of markets (Evans 1995; Hall 1986; Locke 1995; Soskice 1999). Local context also strongly influences the implementation of similar sets of economic and market ideas (Babb and Fourcade-Gourinchas 2002; Carruthers, Babb, and Halliday 2001; Portes 1997).

This approach does not explain the importance of the dynamic between the producers and consumers in the formation of market institutions nor speak to other types of markets (Cetina and Bruegger 2002). With its focus on how the strategy of market actors and their understanding of their environment are situated within a set of market rules, power imbalances, and normative understandings, the institutional approach does not give enough emphasis to the role of networks in generating innovations and reinforcing market cultures and logics.

The performativist perspective injects dynamism into the cultural understandings of market actors beyond their use of social networks to gain information and knowledge and their interpretation of the actions of market competitors. A central claim is that the interpretive ability

<sup>12</sup> Hodgson (2002) presents a similar framework.

and innovation of market actors, especially that of market makers and designers, is grounded in specific ideas and tools about how economic activity should and is organized (Callon 1998; Knorr Cetina and Bruegger 2002; MacKenzie and Milo 2003; MacKenzie 2005). This approach is especially prevalent in the social studies of finance, showing how the backgrounds and specific understandings of market with economics leads to given market structures and outcomes. The performative approach suggests that to the extent that actual markets operate in a manner consistent with economic theory, it is because economic theory was embedded in the original conception of market structures as well as actors' interpretations of the market. A wonderful example of this is Garcia's (1986) analysis of the transformation of table strawberry market in France according to economic theory and implemented through careful selection of market construction including, for example, an auction pricing mechanisms and the removal of interpersonal relationships. While compelling, the idea that market innovations designed in this way always work as intended is overly optimistic (Fligstein and Dauter 2007).

Four general insights arise from the above section. First, market transactions are situated within a broader context of social and political institutions. These institutions present a set of opportunities and constraints, the "rules of the game," that govern the behavior of economic actors. Second, institutions are critical to the effective functioning of a market, not just in cases of market failure. Third, issues of market structure, market power, the cultural and economic knowledge, and specific local contexts will shape how problems are understood and what solutions are seen as possible. Fourth, capitalist firms attempt to diversify their products and engage in other actions in order to survive (Lincoln et al. 1996).

The understanding of markets from economics and the sociology of markets need not be seen as diametrically opposed. An advantage to seeing these theories as toolkit of alternative visions of market organization is that they suggest greater attention to the types of market under examination. Networks and institutions, for example, can be viewed as alternative ways of organizing markets as opposed to an either/or proposition. One such issue are the implications of market size, in particular the number of market actors, and the frequency of exchange between partners for the effectiveness of different institutional innovations. Second, the empirical gaze of the literature shifts between production markets and, specifically, on the relationship between competitors, exchange partners in a supply chain, or on the relationship between producers and consumers or individual buyers and sellers. It is not surprising that scholars have proposed different mechanisms for addressing market problems given the different types of markets studied. Third, there is a theoretical and empirical tension in the literature about whether market dynamics are best understood as abstract phenomena relating to "the market" or specific sets of relationships in a defined marketplace. It is worth asking whether these unique sets of market relationships collectively exert an influence on the formation of the social structures of markets in a way that competes, that is mutually exclusive, or that coexists.

In the next section, I introduce the eBay marketplace in more detail, establishing a framework of market relationships that correspond to the above relationships in the literature and exporing in more depth the interplay between market and marketplace. I then outline how market designers understood their particular market building project and the challenges that it presented.

## eBay as Market and Marketplace

The case of eBay.com, an on-line auction and fixed price sale site where individual sellers are able to post their wares for sale and allow for an open bid auction or fixed price sale by private,

individual buyers throughout the world, offers a natural experiment in how market makers and designers understand the practical problems they face in making the marketplace, what innovations they institute, and how these innovations affect market growth. The study of eBay is useful for several empirical reasons that stem from its position as both a marketplace where buyers and sellers meet to exchange goods and as a market competitor in the emerging world of eCommerce. As a marketplace, eBay's market makers and designers confronted practical business problems in resolving many of the issues discussed above: risk and uncertainty in exchange between trading partners, establishing a market culture and morality, educating market users on how to best use the site, and mediating competition between sellers. As a market competitor itself, eBay had to make strategic decisions in regard to other players in the world of eCommerce in order to remain competitive. In both instances, eBay's market makers and designers experimented with network and institutions-based innovations and strategies informed by their understanding of the way auction markets, and later fixed price online markets, should work. These challenges resulted in the creation of a virtual legal system and a system of governance in order to constitute the marketplace. Analyzing eBay requires treating it at one level as a marketplace and at a second level as a market. EBay as a marketplace draws attention to both the unique nature of its virtual location and the reality of the company as a physical organization, a capitalist firm that is, in part, a product of particular brand of market populism (Frank 2000), At this level ol analysis, eBay's business as a company is to organize an internal market in order to deal with transaction costs and solve the problems of opportunism. This understanding fits with Williamson's (1975, 1993) insight that one of the central issues confronted by firms is whether to undertake activity within or outside the firm. In this view, eBay as a firm would make a rational calculation of the costs of governing transactions in its marketplace and it incorporate those functions where transactions costs were high and maintain relations between itself and marketplace participants as independent entities. The transaction cost emphasis on rational calculation does not grapple with the political dynamics and shared understandings of actors ingrained in marketplaces. As the below discussion begins to highlight, eBay's participants did not view themselves as rational economic agents participating in an abstract market; they viewed themselves as participants in a community that would collectively create its rules and structures. This was a view actively encouraged by eBay as a firm.

There are two other key aspects of understanding eBay as a specific marketplace and as an organization. Prior studies of auction markets have demonstrated that the backgrounds of key market makers and the tools they design (Garcia 1986) and the iterative interactions between actors in a given marketplace (Bestor 2004) are critical in determining market rules and behavior through orienting the perceptions of market actors to particular types of analytical tools and through the mitigation of competition or exercise of power. Unlike the market makers in Garcia's (1986) study of strawberry markets, eBay's founder and managers engaged in pragmatic and experimental problem solving when confronted with marketplace imbalances or flaws often informed by technical backgrounds as management consultants. In Bestor's (2004) analysis of Tokyo's Tsukiji fish market he highlights the centrality of place and of stable and repeated exchanges between auction participants with few alternative venues for exchange. EBay's marketplace differs primarily on the buyer side, where individuals often enter for one-time exchanges with no longstanding commitment to or responsibility the marketplace or particular sellers. The implication is that the sellers and their representative organizations increase in importance sometimes coalescing around shared goals such as the security of transactions and sometimes diverging in their response to market mechanisms like the introduction of fixed price sales and preferred treatment for certain categories of sellers. The ability of certain types of sellers to exit the marketplace and exchange in alternative venues shifts the

nature of cooperation and competition with the marketplace. This attention to how and by whom markets are constructed requires an attention to specific organizations and defined marketplaces.

Yet, at a second level of analysis of eBay as a market, eBay as a firm takes on a governance role over its community of users in a market. EBay itself, is also a market participant in a broader field of eCommerce and thus engaging its evolution at this level becomes important in understanding how changes in the external environment influence the internal functioning of the marketplace. Shifting attention to eBay as a market and as a participant within a broader market field requires drawing on the theoretical approaches in the sociology of markets. The analytical lens shifts to understanding how political coalitions shift market design and influence the creation specific market mechanisms such as auction design and fixed price sales. The form in which bids are made and the sequence rules for bidding reflect the social interactions of market participants (Bestor 2004; Smith 1989, 2007). Here, eBay's uniqueness stems from its move away from a sole commitment to the auction format. EBay and its core competitors in online commerce provide a market environment where two mechanisms coexist—auctions & fixed priced sales and traditional retailing combine with seller marketplaces—which set up competing interests within given marketplaces.

The value in studying eBay as an actor within a broader eCommerce market also extends Smith's (2007) concept of markets as definitional processes beyond auction markets. Smith (1989, 2007) argues that, counter to economic theory, price-setting markets create and define value rather than reveal preferences. The usefulness of auction markets in modern society is that they allow market participants to establish new categories and shared understandings of value. Online marketplaces unsettled traditional buyer-seller arrangements. Online exchanges allowed new types of sellers to enter the market with undefined identities, an increase in one-off exchanges, and a detachment from place. New entrants into this space whether firms like eBay or Amazon, direct online businesses of varying sizes, and or individuals had to define the types of institutions that worked in this environment and how to value new market mechanisms such as reputation scores and other signals of reliability and security. Non-price mechanisms such as customer service, ease of search, defining the security of transactions, are questions of value that market actors increasingly seek to determine in online markets. This orientation towards providing incentives for sellers to provide not just a product but also a certain service standard presents governance challenges. How competitors make sense of their environment matters beyond price-setting or rational calculation of transaction costs. Monitoring the actions of competitors, establishing and protecting market niches, seeking stability and effectiveness over profits reflect the efforts of market actors to manage definitional transformations of their field (Smith 2007). This challenge of assigning value to other aspects of transactions outside the product itself had to be resolved internally for eBay as an online marketplace but also in relation to eBay's competitors.

#### Social Relations in Markets as the Foundation for Market Structuration

eBay, the website, is an online marketplace that hosts a large number of distinct markets. As such, many of the features on the site and the user agreements comprise a set of institutions that facilitate exchange. The original site in United States featured auction listings exclusively across four categories—Collecting, Computer Hardware, Computer Software and Other—and hosted approximately 28,000 listings in 1996. As of the second quarter of 2008, eBay.com features listings in over 50,000 categories and hosts approximately 112 millions listings at any time. A plethora of institutions and associations have emerged around eBay auctions—buyer and seller ratings, special designations for large sellers, eBay stores, the formation of buyer and seller associations, etc. Four

major trends distinguish the contemporary eBay marketplace from the original conception of the site as a venue for individual, consumer-to-consumer, exchange. First, the development of new market formats, most prominently the "Buy It Now" option and fixed-priced sales, led to a continued increase in market size and shifting market structure away from used items and collectibles. New market actors arrived with the change in sales format and new tools available for sellers. Second, the face of the typical eBay seller has morphed from the individual collector selling part of his/her collection or clearing unwanted items out of the garage into that of small and medium sized businesses that can leverage economies of scale, invest in advertising, provide insurance, warranties, and other guarantees. Traditional retailers now occupy a large space in the marketplace. Combined, these businesses sell the vast majority of goods in the marketplace. Approximately 90 percent of eBay registered users are solely or primarily buyers (Tedeschi 2004). The shift from a venue for person-to-person auctions into a platform for small and medium size businesses has also been marked by the introduction of eBay storefronts and the formation of sellers groups and trade associations that lobby eBay for various rule changes or other special privileges.

No longer is eBay the online garage sale of its early days bringing individuals together to exchange goods in a market. EBay, the firm, has actively sought to create new markets (i.e. new categories within eBay) in order to generate more revenue for the company. EBay's shift in focus was an intentional effort to increase the size of the market. EBay celebrated this shift in the market, announcing in its 2002 Annual Report that eBay sellers represented "every link in the distribution chain, from large manufacturers and wholesalers, to small businesses and individual merchants (2002 eBay Annual Report)."

eBay's progression provides a good case for understanding how the company and its users constructed the marketplace and its individual markets. Omidyar and Jeff Skoll started eBay with a vision of a perfect market where all users existed on a level playing field. The sociology of markets started, in part, with the basic idea that the basic premises of the neoclassical view of the perfect market already demonstrated a social structure. Namely, market actors need a venue in which to meet, a means of exchange (i.e. money or a payment system) that facilitates the trade of otherwise nonequivalent goods, information about price, and fundamentally, buyer and seller must believe that the transaction will take place as planned, that the goods are as described, and their exchange partner will not cheat them.

Omidyar's initial design, AuctionWeb, validates this initial analysis of markets. The use of a relatively young technology at the time, the internet, allowed for the shrinking of the geographic limitations to commerce bringing people together who would not have been in the past and offered more universal access to information. There were effectively three formal institutions in the beginning: a commission charged to sellers on the final value of the sale, an insertion fee for all listings, and the Feedback Forum. Users made payments to sellers and Omidyar by mailing cash or checks. Omidyar instituted the Feedback Forum, a venue for users to praise or critique their trading partners viewable by all members, in order to minimize his role as an arbiter of disputes; he believed that making trading reputations public would allow the user community to govern itself. However, the study of the evolution of eBay also reveals a more complex web of social relations and resulting market structuration. What underlying challenges in market construction and incentives for market actors produced the rapid expansion of the marketplace?

To answer this question, I identify four types of relations that mirror those studied in the social studies of markets on top of which and in response to which market structuration occurs. First, horizontal relationships between buyers and sellers in a given exchange revolve around many of the issues in the economics literature—trust, uncertainty, and cooperation. Many of these

problems can be thought to require technical solutions to guarantee that both parties have confidence in a successful transaction. The perfect market story concerns itself primarily with the dynamics of these types of relationship. Second, horizontal relationships between sellers involve collaboration—the sharing of resources and knowledge and the formation of professional assocations—and attempts to mitigate the effects of competition often mediated through eBay in the third type of relationship. Third, vertical relationships between users (primarily sellers) and eBay are critical in shaping market rules, structure, and shaping competition. These vertical relationships involve issues of power and compliance, often coerced through formal or informal rules. EBay's reluctance to act as a governance structure, to insert itself as an arbiter of transactions or mediate competition has been challenged by the tensions in the above three relationships. EBay as a company represents a middle layer between the institutional environment of the national context (e.g. national laws, regulations, etc.) and the specific institutional arrangements in each product category. EBay functions in many ways like a pseudo-state that intervenes in the marketplace in order to encourage certain behavior. Fourth, eBay's relationship to its competitors such as Yahoo, Amazon, Overstock.com, and Google strongly influence market structure as well as the vertical and horizontal relationships described above. All of these competitor sites offer different and emerging models of large online trading platforms for small and medium size businesses. These relationships are influenced as much, if not more, by demands of publicly traded companies to meet shareholder expectations for market growth.

I employ a mixed-method approach to study the case of eBay as market and marketplace. I use a quantitative time series analysis to study eBay's internal market by tracking market metrics and identifying and codifying market institutions on a quarterly basis. This approach allows me to interpret the effect of specific interventions on the growth of the marketplace and to show which ones were essential to making the market. Details on the quantitative analysis are provided in the corresponding chapter. I also used a variety of qualitative sources to fully understand how market makers and actors understood and defined the marketplace. As a public company, much of eBay's performance and self-assessment is in the public domain through their own website, annual reports, presentations to stockholders, and their strategy and performance is analyzed by a wide network of stock analysts. I used eBay's annual reports, stock analyst presentations and other published materials to understand how they framed their marketplace and positioned it in relation to competitors. I compared this information with data and analysis provided in analyst reports on eBay from 2000-2010 from most of the major firms including BofA Merrill Lynch, Credit Suisse, Citi, Morgan Stanley, Deutsche Bank Securities, Goldman Sachs, JPMorgan, and Barclays Capital as well as other analysts more intermittently. Analyst reports provided useful insight into how eBay communicated its strategy, how this information compared to competitors, and data on site usage and seller community responses.

I monitored and collected data from several sources to understand the perspective of the online seller community using archives as far back as 1996 when available and up to the present. Many seller associations and eBay community groups created websites, blogs, and/or discussion boards that represented collective views, public statements, and individual seller opinion. Among the most useful are Auction Bytes, and independent trade publication for online merchants, The Auction Guild which positions itself as a representative of small sellers in the online auction and

trading industry, the Online Trader's Web Alliance from until its demise in 2007, and Scott Wingo's eBay Strategies (ebaystrategies.blog.com) and Amazon Strategies (amazonstrategies.com). EBay's website also hosts a variety of discussion boards for all aspects of the community which proved a rich source of data, particularly when controversial changes were made in market formats or fee structures. as well as a cottage industry of online selling consultants.

I complimented the above sources with 53 formal and informal interviews with eBay managers and executives and members of the seller community. My selection of interview subjects was based on availability as opposed to any form of random sampling, however many of eBay's top executives were available in public forums such as their annual eBay Live! Conferences. I also had several contacts within eBay, Inc. with whom I confirmed information and solicited opinions that assisted me in identifying potential interview subjects or key issues. Public comments and interviews of Ebay's founder, Pierre Omidyar, as well as many other top executives included past CEO Meg Whitman and current CEO John Donahoe are publicly available online and offer a valuable source of data about how they interpret and rationalize the dynamics of the marketplace. I also interviewed several members of the seller community that I identified as emblematic of certain categories of sellers or representatives of trade associations based on the above materials, availability at online commerce conferences, or through references from other sellers or eBay employees. Many of these individuals were prominent figures at eBay Live! by which I mean that eBay placed on key seminar panels or established separate venues for them to meet with eBay employees.

Managing Risk and Uncertainty between Buyer and Seller

Our purpose is to pioneer new communities around the world built on commerce, sustained by trust and inspired by opportunity -- eBay's 2006 Annual Report

In Chapter 2, I address how eBay evolved to address the uncertainty of exchange between the horizontal relationships between buyers and sellers. EBay's model of providing a basic venue for market exchange with limited regulation relied on buyers and sellers comporting themselves in a way that engendered a belief in the reliability of the marketplace as a whole. Transgressions by a significant number of market participants had the potential to pollute the ethos of the site and, thus, its viability. EBay's management determined that current market participants and potential entrants would lose trust in eBay as company and marketplace if it did not lubricate trust between buyers and sellers. This concern pushed eBay to track buyer and seller behavior and intervene in exchanges at a systemic level. The result was that eBay's governance structures shift much of the burden of positive exchanges onto the company and away from the direct exchange partners. EBay intended its interventions to embed exchange within social relations at one level and through formal regulation and binding contracts between buyer and seller.

Using fixed effects regressions on quarterly panel data from eBay categories over a seven year period, I show that eBay had to solve trust in four areas: making sure that buyers trust sellers through fraud protection, ensuring that sellers trust buyers by providing a secure means of payment, and establishing the rules of fair competition between sellers. The particular way in which eBay addressed the uncertainty of buyer-seller exchange relied on formal rules that limited market participant's ability to interpret networked based solutions. The inversion of eBay's founding approach to uncertainty and moral vision of exchange. A belief in generalized trust undergirded Omidyar's conviction that most people behave ethically and responsibly, and that those that did not would be driven out by the majority (Cohen 2004). EBay executives with Omidyar's support ultimately propped up this core belief with a more pragmatic implementation of formal and informal mechanisms that acknowledged the limits of, and gaps in, embedded trust networks in

buyer-seller exchanges. The reality of marketplace exchange on eBay—often anonymous, one-off, and not embedded in real world networks—is not consistent with the social embeddeness of the environments discussed by Granovetter (1985) and Guseva and Tona-Tas (2001) nor as readily amenable to technical solutions that allow for a rational calculation of risk. The challenge for eBay's market makers was to develop institutions that help users assess the trustworthiness and reliability of exchange partners in this unique online environment.

## Internal Market Dyanmics: Managing Competition between Diverse Groups of Sellers

EBay's management also confronted the arguably more complicated and political task of managing competition between its diverse seller community. The mechanics of lubricating marketplace transactions between buyers and sellers rested within a broader context of defining the terms of fair competition between marketplace sellers, determining the process through which sellers could list and advertise their products, and the format through which exchange took place. As prior studies of auction markets have shown, the institutions that structure exchange are formed by market participants as a means of defining categories and controlling competition (Bestor 2004, Smith 1989). Chapter 3 explores how the interplay of this second set of horizontal relationships comprised of competition and collaboration between internal marketplace sellers and their hierarchical (vertical) relationship to eBay as a marketplace manager produced a dramatic transformation marketplace. These conflicts were laden with debates about the appropriate role of marketplace culture and morality.

The expansion of eBay's seller community through new market categories and formats introduced new understandings about the core values and purpose of the marketplace. The company often invokes the idea that eBay is in partnership with the community. In a twist on the famous quote that "What's good for GM is good for the country," eBay states that what is good for the seller community is good for eBay (admittedly with a stronger ring of truth). As this community of sellers diversified and organized into seller associations and trade guilds, collaborating with them in a partnership or imposing decisions in a hierarchical fashion became complicated and divisive. EBay's decisions as a marketplace manager produced three dramatic shifts in market rules and structure. First, despite its origins as an online auction market, eBay now produces more than 50% of its trading volume in fixed priced transactions. Second, eBay's commitment to small individual sellers competing on a level playing field shifted to an emphasis on small to medium sized businesses and established online sellers with tiers of preferred sellers. Third, eBay's management replaced its public and transparent reputation system with a hybrid public-private reputation ranking wherein eBay internally evaluated feedback profiles and used these results to alter search listings and seller rankings.

## The Competitive Environment: Horizontal Relationships and the Emergence of Internet Commerce

In Chapter 4, I approach eBay as a competitor in an emerging field of eCommerce, one in which it was a pioneer, and how the company's interpretation of its competitive environment influences the above discussed governance of its internal marketplace. EBay and other online merchants collectively define and develop models of online commerce by paying close attention to one another's shifts in marketplace design and institutions. The largest of these firms—Amazon, Wal-Mart, Google, Costco—have converged on variations of a hybrid direct sales and seller marketplaces. The shared understanding that seller marketplaces represent an effective and novel way of dealing with the producer-supplier relationship leads to direct competition between these

firms in the recruitment and retention of online sellers. These online sellers has become the central point of competitive pressure in the field and drives many decisions about how to organize eBay's internal marketplace. Simultaneously, the diversification of these larger firms including eBay into a broad array of categories has opened up opportunities for niche players to compete in specific market segments. I show that the interplay between eBay marketplace's internal politics and its participation in defining online commerce is a reflexive process that does not fit easily with the perception of rational firms making clearly articulated and calculated decisions about transactions costs or efficiency. The competitive environment highlights the way firms engage in definitional processes in emerging markets as firms develop a shared perception of the key points of competition.

#### The Transformation of the Perfect Market

The dynamics of the four types of relationships discussed in this study suggest that the idea of a perfect market does not represent everyone's interests. Perfect remarks remain more the domain of academic dreams than market realities. Omidyar's original structure of the perfect market governed through networks of relations between marketplace users, a view shared in the popular and academic literature on eBay, looks substantially different today. Despite its initial reluctance, the company stepped increasingly into a governance role spurred by the desire to expand the marketplace further in order to increase profits and by user calls for greater regulation and surveillance. Once eBay became a publicly traded company, shareholders and market analysts placed pressure on eBay to continually expand. Expansion depended on enticing more buyers and sellers to the market through changes in market structure in terms of new categories, new sales format such as fixed-price sales, and international expansion. The need to manage a rapidly growing and increasingly diverse population of buyers and sellers required broadening the company's role as a market manager. EBay's role as market manager moved it into the world of intervening in the growing number of disputes between buyers and sellers and arbitrating discussions of the rules of fair competition between sellers in its various market categories.

The story of eBay.com is also relevant for understanding the institutional problems faced by impersonal, anonymous markets permitted through the Internet and new communications technologies. While eBay's particular solutions may not work in all markets, they provide an important look at the emergence of institutions, exploring how they changed, and measuring their impact on the market. These advantages offered by the Internet and new communications technologies—more universal access to information, the shrinking of the geographic limitations to commerce bringing people together who would not have been in the past—expand the universe of potential trading partners and the ease with which individual economic actors can shop for alternative sources making one-time exchanges more common than repeated exchange.

More broadly, the case of eBay speaks to the discussion about the institutional foundations of markets, the dynamics of institutional innovation, and its implications for market construction. At the beginning of this chapter, I suggested that sociologists and many economists proffer three alternative perspectives on the mechanisms critical for the construction of markets: markets networks, markets as institutions, and markets as performance. In order to advance our theory of markets, these theories need to be put in dialog, reinforcing areas in which they agree, demonstrating the market conditions under which one set of mechanisms or explanations hold sway, and examining their interrelationships. The story of eBay.com and the social relations within it between

buyer and sellers, sellers and sellers, sellers and eBay as a company, and between eBay and its competitors offers a natural experiment for this theoretical endeavor.

# Chapter 2

# Trust Matters: Risk and Uncertainty on eBay

One prominent issue confronting economic sociology is to understand what institutions are necessary to create effective markets. These efforts are important today in contemporary national economies undergoing transitions as well as emerging online markets that transcend national borders. Sociologists have pointed to the importance of social relations whether understood as networks (Granovetter 1985), political battles over the rules of the game (Bourdieu 1984; Bourdieu and Wacquant 1992; Fligstein 1991, 1996), or more micro interactions between market actors (Kollock 1994, 1999; Yamagishi, Cook, and Watabe 1998). The need and desire of actors to create stable environments through the reduction of uncertainty is central to these inquiries.

The literature in the sociology of markets, institutional economics, and the economics of information present two alternative visions of how market actors create institutions to deal with widespread uncertainty. One vision understands markets as sets of embedded relationships (Granovetter 1985). Market actors coordinate with one another to share resources, establish trust, and create stability. Once in place, these relationships provide relatively stable and reproducible roles.

An alternative vision sees institutions as sets of rules that compensate for the absence of trust networks. Market expansion is based in facilitating institutions, rules of exchange, and governance structures that provide stability and opportunities for economic expansion (Cook, Hardin, and Levi 2005; Fligstein and Stone Sweet 2002; Greif 2006; Guseva and Rona-Tas 2001). These institutions are critical in allowing markets to develop and form the basis of large, modern economies. The markets as networks and the markets as rules approaches acknowledge that there are multiple types of markets and a variety of sets of institutions to meet the challenge of "ubiquitous uncertainty" (Guseva and Rona-Tas 2001).

The above two perspectives offer an analytical lens through which to understand how markets develop and where and when networks and rules matter. Entrepreneurs' growing use of the Internet to design online marketplaces such as eBay.com, Amazon.com, and Google Checkout, presents a unique empirical opportunity to analyze how market designers confront and attempt to address uncertainty among marketplace users. The internet has paved the way for an increasing number of global, impersonal markets where individuals exchange goods and services with peopleoften in one-time exchanges. In an earlier study of online markets, Kollock (1999) used eBay as an example of a market that lacked a formal clearing mechanism and emphasized the role of network based reputation systems as a risk management strategy. This pioneering work demonstrated the vital role of networks for online markets in their infancy. The most successful of these marketplaces have grown exponentially since that time and raise the question of what types of continued intervention underlay this market growth. I use the case of eBay, an online, person-to-person marketplace to examine how network-based and rules-based reforms alter the willingness of people to participate in a market. In an emerging market such as eBay, as market actors – by which I mean the market makers and designers within eBay itself as well as its community of buyers and sellers – develop mechanisms for reducing uncertainty, what will entice people to exchange? Is it the changes

that make people more connected to one another or the changes that protect them from one another?

EBay's effort to build a market has met with enormous success since its IPO on September 24, 1998. The company is the leading e-commerce site in eight of the top ten markets— the U.S, Germany, the United Kingdom, South Korea, Australia, France, Italy, and Canada. **EBay** users successfully closed auctions totaling over US\$52 billion in 2006 in gross merchandise value (GMV). According to the company's June 2007 quarterly report, there are over 83 million active users. Bay's 2006 GMV would place it in the top one third of countries in terms of national GDP. The 83 million active users in the marketplace is greater than the population of all but 15 countries in the world, just ahead of Germany (82,314,900), and well more than Iran (approximately 71 million), France (approximately 64 million), and the UK (approximately 60 million).

Ebay's success depended on its ability to solve practical business problems. EBay executives discovered impediments to market growth and tried to solve the issue of trust and uncertainty in relationships. EBay was set up as a libertarian vision of a free, self-regulating market for individual buyers and sellers meeting anonymously. But this vision quickly faded as their attempt to build an online market confronted a number of challenges. These challenges resulted in the creation of a virtual legal system and a system of governance in order to constitute the marketplace. EBay had to establish rules and guidelines in response to user requests. The focus of this paper are the mechanisms eBay used to reduce uncertainty in trading between anonymous partners in an online environment. These include a number of innovations. First, eBay educates its user population through eBay University classes throughout the country as well as with an ever growing array of online tutorials that cover basic issues like how to safely and responsibly trade on the site. They also teach users how to read, understand, and verify seller reputations and reliability. Finally, they communicate eBay community values, as well as more complicated tips and strategies for selling. Of major importance, eBay has effectively set up its own banking system, PayPal, which has had a positive, significant impact on the growth of the market. Networks are about embeddedness; but networks do not exist a priori in anonymous marketplaces like eBay. Networks often foster trust when there are reproducible role structures (White 1981, 2002) but do not pertain to more fleeting relationships between buyers and sellers.

The question that I seek to address is how eBay constructed and evolved market institutions and which institutions were critical to achieving such growth. I posit that market actors respond to problems of uncertainty by creating institutional innovations. The anonymity of buyers suggests that networks do not work as well because relationships are fleeting. Market actors are primarily buyers who venture onto the site to purchase goods in one-time exchanges. Thus an exchange partner's reliability and trustworthiness is not established through repeated interactions. Furthermore, it is fairly easy for buyers to drop old online identities and create new ones. Institutions as formal rules provide an alternative to networks in building trust where relationships are fleeting. In the absence of networks, people create rules and market participants need to believe in those rules in order to be willing participants. The case of eBay demonstrates the importance of a rule maker to the growth of anonymous markets. More broadly, the case suggests that networks and rules are alternative ways of organizing market activity and that anonymity in markets leads to the formalization of institutions.

<sup>13</sup> Active users are defined as users who have bid on, bought, or listed an item in the past 12 months; users may register more than once and therefore have more than one account.

<sup>14</sup> There are obviously exception particularly in market sectors dealing with collectibles.

I consider the two predominant explanations in sociology and institutional economics for the rise of market institutions and their implications for the expansion of markets. I then introduce the case of eBay and present four ways in which eBay and its users responded to the perceived problems of anonymous, geographically dispersed, online markets: the creation and formalization of a secure online banking system, a feedback rating that quantified reputations and made them visible, formal dispute resolution services, and fraud protection programs. Next, I test the influence on a set of innovations within these four categories on the making of the market. More specifically, I test the hypotheses suggested by the literature that innovations that allow marketplace users to exchange information about market practices, that create institutional trust, and that convert uncertainty into "calculable trust" enhance the functioning of the market. My results show that eBay had to solve trust in four areas: making sure that buyers trust sellers through fraud protection, ensuring that sellers trust buyers by providing a secure means of payment, and establishing the rules of fair competition between sellers. I conclude with a discussion of the implications of these results for our understanding of the role of networks and institutions as rules in emerging global, anonymous markets.

#### Networks and Rules as Alternative Forms of Market Governance

Social scientists who study markets agree that market actors seek to create stable environments through the mitigation of competition and the reduction of uncertainty. These actors create institutions that structure market interactions in predictable ways (Guseva and Rona-Tas 2001; North 1990; Williamson 1993). Market mechanisms and governance structures reduce uncertainty, often through the formation of calculative trust, creating stability and predictability. In the economics literature, social capital in general, and trust in particular are theorized to facilitate transactions in instances of market imperfection (Alesina and La Ferrara 2002) or to lower transaction costs (Williamson 1981). The literature proposes two mechanisms for dealing with uncertainty in markets. Networks are commonly thought to substitute for information, resources, or trust (Baker, Faulkner, and Fisher 1998; Kollock 1999; Kollock and Braziel 2006; Powell and Smith-Doerr 1995; Stuart 1988, Stuart, Hang, and Hybels 1999; Uzzi 1996). Alternatively, institutions are formal rules or arrangements that govern the terms of exchange, provide sanctions, contracts, or define the rules of fair competition and also eliminate the need for trust (Cook et al. 2005; Williamson 1981).

The literature suggests two ways in which actors create trust<sup>15</sup> in markets— (1) through networks that perform a large number of roles from information providers to reputation and credibility; and (2) through the creation of an institutional setting of sanctions and incentives. This is, of course, a simplification of a diverse literature. These two categories do, however, capture the core role of social institutions in the coordination of social life in the literature even if they disagree on the exact definition of trust and its primary source. They also encompass the question of in what individuals trust—individuals (often referred to as horizontal trust), informal institutions

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<sup>15</sup> I use the definition provided by Guseva and Rona-Tas's (2001) which explains trust as "positive expectations in the face of uncertainty emerging from social relations. These expectations are good intent, competence (ability), and accountability (availability of the object of trust for sanctioning) (627)". This definition has three advantages. First, as explained in their paper, this definition has the advantage of not being reducible solely to rational calculation. Second, it offers a definition that, for the most part, coincides with the concept of trust in a broad array of the sociological literature. Third, it corresponds closely with how actors in the eBay marketplace explain their decision-making in my empirical data from interviews and monitoring online discussion groups.

(community values—a set of widely held norms, roles, and values in a population), or formal institutions (government regulation). Understanding markets as networks and rules provides differing analytical lenses as to what mechanisms produce trust in markets and the consequent outcomes. More implicit in the literature is a discussion of the size of the market—in terms of the number of market actors—and the frequency of exchange between actors. The literature is not always clear in examining under what conditions or what settings each set of mechanisms catalyze market growth.

These two approaches, networks and institutions as rules, represent alternative forms of governance of markets. Figure 2.1 presents a schema for understanding different types of markets and the role of institutions as rules and networks. Box I represents all markets in their early stages. Markets and market actors are pervaded by and with uncertainty, there are few or no established market relations, poorly defined market roles, and no established rules of exchange. In essence, this is where the eBay marketplace started. Major corporations and big business are at the opposite extreme (Figure 2.1, Box IV) with highly developed networks and complex sets of rules. For example, eBay is in competition with companies such as Amazon, Overstock.com, uBid, and Google. This set of market actors engage in strategies based in part on watching the actions of others. At the same time, their competition is mediated by a complex set of rules and regulatory structures. The literature suggests that markets must move from the space of minimal rules and networks (Box I) along two trajectories in order to grow: towards greater rules or deeper embeddedness. The networks approach is about embeddedness (Figure 2.1, Box III). Networks often foster trust when there are reproducible role structures but do not pertain to more fleeting relationships between buyers and sellers.

For the markets as networks approach (Box III), decision making based on trust depends on social networks (Carruthers and Babb 2000; Granovetter 1985, 1994; Kollock 1994; Kollock and Braziel 2006; Portes 1994; Powell and Smith-Doerr 1994; Uzzi 1996). For example, Uzzi (1996) distinguishes calculative from heuristic behavior, the need for mutual acquaintances to prime relationships, a trial phase characterized by calculative behavior, and cooperation for nonreputational reasons. Montgomery (1998) extends this analysis to suggest that situations elicit various roles and identities in individuals. The content of these roles is socially constructed. Under this view, reputation and perceived trustworthiness are a product of one's network of relations—in this case, of other eBay users with whom individual has exchanged goods (Coleman 1990; Dasgupta 1988; Frank 1988). The integration of trust networks into formal government operations while retaining some independence is important for effective social coordination (Tilly 2005). Kollock (1999) argues that the use of trust networks is particularly useful in markets that do not have formal clearing mechanisms.

However, markets embedded in trust networks tend to be small, limited by the ability of market participants to exchange outside of established, embedded relationships. In contrast to generalized trust (a general belief in the trustworthiness of others), embedded trust creates conditions for expanded exchange based on relatively stable, reproducible relationships (Cook et al. 2005; Guseva and Rona-Tas 2001; Yamagishi et al. 1998). Unlike other studies emphasizing the role

<sup>16</sup> Harrison White (2002) is a notable exception and will be discussed below.

<sup>17</sup> I acknowledge that the extensive body of research on embeddedness sparked by Granovetter's (1985) seminal work posits the importance of networks as a mechanism for providing a variety of market functions--providing information, knowledge and learning, and cooperation, and trust (cf. Powell 1990, 2004, 2005)--that are distinct from producing trust. I limit my discussion of this literature to trust because that is the aspect of market exchange on which I focus. The alternative functions performed by networks may be central in explaining the formation of user groups and discussion forums on eBay and about virtual markets more broadly.

of networks in markets, White (1981, 2002) argues that production markets are hard to sustain with more than a dozen actors due to limits of perception and cognition regarding the actions of a higher number of firms (White 2002: 10).18 In White's model, production markets are governed by networks of producers that situate themselves in a niche based on price and quality relative to one another. Producers impute consumer demand based on the positioning and sales of their competitors under conditions of repetitive transactions and sustained competition.

One explanation for the failure of many business-to-business online, anonymous markets is that market designers underestimated the importance of small networks of social relationships between buyers and sellers for solving problems and providing informal insurance (Kollock and Braziel 2006). Most studies of networks look at the vertical relationships in supply chains (Uzzi 1996) or the importance of networks in gaining resources (Stuart 1988, Stuart et al. 1999). Not all markets are equal; networks are difficult to establish and may not explain much of market growth in marketplaces that bring together anonymous buyers and sellers. The focus on producers and sellers in the networks approach presents a different set of market problems than that of trading markets which must deal with organizing large numbers of buyers and sellers (Cetina 2004). Market designers in these markets confront a different set of practical problems, namely how to make buyers and sellers confident that exchange contracts will be upheld.

Guseva and Rona-Tas (2001) argue that the above type of market produces uninsurable and untradeable risk and uncertainty. Their study of the credit card markets in Russia and the U.S. demonstrates that rational calculation based on formal institutions allows for disembedded and numerous transactions. The U.S. credit market (Figure 2.1, Box II) followed a path of rational calculation—relying on credit score agencies—which provide conditions for a mass credit card market. Russian banks, in contrast, operated through trust networks and had, consequently, a limited credit card market. Russian banks (Figure 2.1, Box III) in the absence of facilitating institutions relied on embedded trust, trust networks and anchoring institutions. Guseva and Rona-Tas's (2001) comparative research provides a unique insight into the nature of risk and uncertainty in markets and the possibility of different solutions and consequent implications for market growth. The two cases - formal, rational calculation based on facilitating institutions in the U.S. case and trust networks in the Russian case - leave open the question of market creation in large, anonymous markets absent formals methods of assessing trustworthiness of trading partners. The calculation and formalization of credit rating agencies demonstrates one mechanism by which market actors can address trust. But trust is multidimensional and market actors confront different kinds of uncertainty in exchange relations where trust is important including that between buyer and sellers, trust between sellers to ensure fair competition, and trust between market actors and market makers (users and eBay the company in this case).

The markets as rules literature (Figure 2.1, Box II) shares the distinction between trust in specific individuals and more general trust in people or systems (Giddens 1990; Luhmann 1988; Yamagishi and Yamagishi 1994). There is a consensus that the imposition of institutions and mechanisms outside of a given exchange allows individuals to interpret the exchange differently. Institutions arise to guide the interaction of actors, to provide the rules of the game (Bourdieu 1984; DiMaggio and Powell 1991; Fligstein 1991, 1996; Jepperson 1991; North 1990).

The economics of information addresses some of these concerns and suggests a similar role for government intervention. Problems associated with information produce two central hazards in markets: adverse selection and moral hazard (Stiglitz 2000). Selection problems arise when economic

<sup>18</sup> For example, Uzzi's (1996) study of the role of networks among apparel firms is based on an ethnographic study of 23 firms and a quantitative analysis of 479 firms.

actors do not possess the necessary information about the reliability, skills, experience, etc. of trading partners.<sup>19</sup> Thus, actors engage in self-selection, signaling processes, and direct expenditures (screening, verification, search) in order to find the best match. Moral hazard is an incentive problem wherein actors try to monitor the behavior of those with whom they have contracts in order to achieve the desired behavior (e.g. insurance companies wanting clients to be risk averse).

The economics of information requires an understanding of the dynamism of markets—how the economy and individual economic actors adapt to, create, use, and understand new information and knowledge. This insight, which has not been explored in great empirical depth in the economics literature, raises the issue of how social knowledge and signaling conventions are created and interpreted. The orientation of economic actors to the actions of others and the idea that these actions are interpreted with the use of particular frames of knowledge closely mirrors the dominant view in the sociology of markets (Fligstein 2002).

Sociological analyses that focus on modern production markets argue that markets are characterized by incumbent-challenger relations between producers, that market structures are socially constructed, and that the negotiation of market institutions is designed to mitigate the effects of competition, increase stability, and maintain the privileged position of dominant producers (Fligstein 1996; Hodgson 2002; White 1981). This approach does not explain the importance of the dynamic between the producers and consumers in the formation of market institutions nor speak to other types of markets (Cetina and Bruegger 2002).

Historical studies that have looked at the growth of markets in specific contexts argue that the creation of rules and facilitating institutions are central to success of large markets. In a historical study of the late Medieval period, Greif (2006) argues that the rise of the West resulted from the creation of third party enforcement to allow for anonymous exchange. Increasing political conflict constrained trade based on kin-based networks and weakened the state. The anomie of market society created pressure for more formal rules and, in the end, allowed for a larger expansion of trade, and creation of a modern state through institutions such as courts.

The above literature argues that markets are often incomplete or socially constructed spaces that often produce anomie, fragmentary information feedback and high transaction costs. Institutions reduce uncertainty by providing a structure to market interactions (Guseva and Rona-Tas 2001; North 1990; Williamson 1993). Institutions can be formal constraints—specifically devised and codified rules--or the informal constraints of conventions and codes of behavior. Fligstein (1996) posits four such social institutions as necessary preconditions to existence of markets: property rights, governance structures, rules of exchange, and conceptions of control. The rules of exchange define who can transact with whom and the conditions under which transactions are carried out. Market actors must solve the problem of defining legal and illegal forms of competition (Fligstein 1996, 2002). Baker et al. (1998) suggest that network structures in relationships between advertising agencies and their clients constitute the rules of exchange; the precise nature of these relationships, the rules of exchange, can change over time – in this case from fixed-prices to exclusivity, to loyalty.

Viewing networks and institutions as rules as alternative forms of governance leads first, and most obviously, to an examination of the mechanisms central to market growth. Each approach suggests a different analytical lens through which researchers can understand the essential

<sup>19</sup> Adverse selection can also refer to many other types of exchanges like the search by companies for competent employees. Companies are searching for individuals with the necessary skills to complete a job but may not possess all the desired information about a person's experience, character, etc.

<sup>20</sup> Hodgson (2002) presents a similar framework.

institutions in markets. The institutions as rules approach can be understood partially as a set of prescriptions about what states, in this case eBay, should do to deal with information problems. Institutions in this context are formal arrangements between buyers and sellers as well as between sellers that govern the terms of exchange and the grounds for fair competition. In contrast, the networks approach suggests that information problems can be solved by embedding market interaction in social networks that create and transmit information, signals, and sanctions. Market actors base decisions on past experiences with potential exchange partners or use social networks to glean information about their trustworthiness.

A second, perhaps less obvious advantage of seeing institutions as rules and networks as alternative visions of market organization is that they suggest greater attention to the types of market under examination. Implicit in both of these approaches are the implications of market size, in particular the number of market actors, and the frequency of exchange between partners for the effectiveness of different institutional innovations. Even if market and social institutions are about lowering transaction costs through establishing trust, reducing uncertainty, and adjusting for information asymmetries, that still leaves the issue of how these problems are solved in local contexts. Much of the literature on markets focuses on production markets and, specifically, on the relationship between producers or exchange partners in a supply chain, or on the relationship between producers and consumers or individual buyers and sellers. How do market actors understand their problems and what innovations do they put in place to solve them? How integral are these institutions to the making of a market?

The case of eBay provides a unique case for understanding the importance of networks and institutions. EBay confronts both sets of problems—that is managing a large, rapidly growing set of sellers and buyers, as well providing a forum in which buyers and sellers feel comfortable engaging in exchange. EBay needed to establish clear rules of exchange and governance structures in the marketplace. The large number of market actors, primarily interacting in one-time exchanges, in eBay's virtual marketplace presents a challenge as to how far market governance embedded in social networks extends and whether formal rules are critical. In the next section, I introduce the eBay marketplace in more detail outline how market designers understood their particular market building project and the challenges that it presented. I then look at the specific mechanisms eBay introduced to address buyer-seller and between-seller uncertainty after making the case for examining eBay as a set of institutions.

## eBay as Marketplace and as a Set of Institutions

The case of eBay offers a real world example of how market makers and designers understand the practical problems they face in making the marketplace, what innovations they institute, and how these innovations affect market growth. EBay is an on-line auction and fixed price sale site where individual sellers are able to post their wares for sale and allow for an open bid auction or fixed price sale by private, individual buyers throughout the world. By connecting individuals to individuals, AuctionWeb—the initial name for the site—would not rely on selling from a centralized source. Users would operate on a level playing field with equal access to information on price and product for buyers. Sellers would have an equal opportunity to sell their products regardless of their size or assets. Buyers and sellers would engage in exchange through an auction format that would yield the perfect price—the exact point where supply meets demand.

The eBay.com marketplace platform that Omidyar created is open 24 hours a day, seven days a week, and now appears on localized sites in 24 countries. The original site in United States featured

auction listings exclusively across four categories—Collecting, Computer Hardware, Computer Software and Other—and 48 subcategories and hosted approximately 28,000 listings in 1996. There were effectively three formal institutions in the beginning: a commission charged to sellers on the final value of the sale, an insertion fee for all listings, and the Feedback Forum. Omidyar instituted the Feedback Forum, a venue for users to praise or critique their trading partners viewable by all members, in order to minimize his role as an arbiter of disputes; he believed that making trading reputations public would allow the user community to govern itself. Users made payments to sellers and eBay by mailing cash or checks to the recipient.

EBay, the website, is an online marketplace that hosts a large number of distinct markets. As such, many of the features on the site and the user agreements comprise a set of institutions that facilitate exchange. EBay, the firm, has actively sought to create new markets (i.e. new categories within eBay) in order to generate more revenue for the company. Consequently, eBay progressed from small individual sellers primarily posting collectibles in an auction format into a marketplace with increased numbers of fixed-price sales that hosted markets in larger, more expensive items such as cars and computers and composed of corporate sellers such as Sun Microsystems, Best Buy.

EBay's progression provides a good case for understanding how the company and its users constructed the marketplace and its individual markets. Much as the institutions as rules literature envisions, Omidyar imagined that by creating a community he could reduce the need for formal governance structures. The practical reasons for community in the inception of the company were that it made users more self-sufficient and reduced demands on Omidyar's time. He also had a normative and moral vision of exchange within a community. Omidyar believed in the social contract that people operate according to moral values and that they are basically good and that given a chance to do right, they will. EBay had to ensure that users—both buyers and sellers—have a positive experience in its marketplace in order to maintain its network advantage. The marketplace's success depended on the presence of buyers—in order to attract sellers—and sellers in order to attract buyers, who would only be drawn to the site if exchange partners were deemed reliable more often than not. EBay engaged in a conscious effort to create a certain culture and ethic around interactions on eBay (an "eBaysian culture")—the libertarian philosophy of the community itself had to be constructed and cultivated. As Cohen (2002) point outs, the company went to great lengths to cultivate community on it site. In the early days, staffers routinely sounded off on the site's bulletin boards using pseudonyms, even denying that they worked for eBay when asked, in an effort to propagate its version of ethical market behavior.

Omidyar's original structure of the perfect market governed through networks of relations between marketplace users, a view shared in the popular and academic literature on eBay, looks substantially different today. Despite its initial reluctance, the company stepped increasingly into a governance role spurred by the desire to expand the marketplace further in order to increase profits and by user calls for greater regulation and surveillance. Market expansion and the increasing complexity of managing market users generated the need for a rapid growth in formal market rules and elaborate governance structures in addition to increased barriers to entry for sellers. The townhall idea refers to eBay's attempts to listen, respond to, and police its community of users. Once eBay became a publicly traded company, shareholders and market analysts placed pressure on eBay to continually expand. Expansion depended on enticing more buyers and sellers to the market through changes in market structure in terms of new categories, new sales format such as fixed-price sales, and international expansion. EBay's emerging role as market manager moved it into the world of intervening in the growing number of disputes between buyers and sellers and arbitrating discussions of the rules of fair competition between sellers in its various market categories. Why

were these changes made and what problem did eBay executives confront? Which of these changes was pivotal in making the market?

## eBay's Online Marketplace as a Test Case of Market Uncertainty

Our purpose is to pioneer new communities around the world built on commerce, sustained by trust and inspired by opportunity -- eBay's 2006 Annual Report

EBay as a company faces a version of the moral hazard problem because their desire to have buyers and sellers act in a way that increases trust, traffic, and exchange in marketplace requires them to monitor and regulate buyer and seller behavior. Trust in the eBay marketplace stems from two types of social relation: buyer to seller and user to eBay. EBay has increasingly acted as a government, enforcing rules, providing sanctions, and mediating disputes. More trust in eBay's governance reduces need for trust in a direct exchange partner. The importance of governance structures increases in "impersonal" online markets such as eBay where social interaction is complicated by distance and geography. EBay attempted to address potential trust deficits by embedding market exchange within social relations that espoused a particular community ethos about good behavior, an approach supported by the networks literature, and through the introduction of formal rules and arrangements between buyer and seller, an approach supported by the institutions as rules literature. As discussed above, the networks literature argues that embedding market exchange in social relations such as network-based reputation systems (Kollock 1999) or through direct interaction between buyer and seller provides sellers invaluable information about the trustworthiness of trading partners.

Omidyar's vision rested on an assumption of generalized trust, "that people are basically good." But over time, eBay executives introduced formal and informal mechanisms to deal with uncertainty and the limited scope of embedded trust networks in buyer-seller exchanges. The marketplace is not socially embedded in the manner often discussed by Granovetter (1985) or Guseva and Rona-Tas (2001). Vertical relationships involving resources and funding do exist for sellers but are not the core type of exchange that takes place on eBay. And few means exist for measuring at a market or population level the trustworthiness or level of risk associated with buyer-seller exchanges. EBay created formal institutions designed to help actors deal with anonymous exchange in the marketplace; institutions that help users assess the trustworthiness and reliability of exchange partners in the absence of real world networks and rational calculation.

North (1990) argues that markets are often incomplete, producing fragmentary information feedback and high transaction costs. Institutions reduce uncertainty by providing a structure to market interactions (North 1990; Williamson 1993; Guseva and Rona-Tas 2001). Institutions can be formal constraints—specifically devised and codified rules--or the informal constraints of conventions and codes of behavior. The approaches to uncertainty in markets discussed above can be seen partially as a set of prescriptions about what states, in this case eBay, should do to deal with information problems or trust or network deficits. From this perspective eBay needs to occasionally intercede in the marketplace to create social and market institutions that address the problems associated with adverse selection and moral hazard. Selection problems arise when economic actors do not possess the necessary information about the reliability, skills, experience, etc. of trading partners (Stiglitz 2000).<sup>21</sup> Thus, actors engage in self-selection, signaling processes, and direct

<sup>21</sup> Adverse selection can also refer to many other types of exchanges like the search by companies for competent

expenditures (screening, verification, search) in order to find the best match. Moral hazard is an incentive problem wherein actors try to monitor the behavior of those with whom they have contracts in order to achieve the desired behavior (e.g. insurance companies wanting clients to be risk averse).

The above claims in the literature provide plausible propositions about why actors want and/or need institutions. Market makers need to determine what types of institutions address this need and which innovations are feasible. EBay interjected itself into buyer and seller exchanges in order to reduce uncertainty in four major areas: payments between buyer and seller, a community ranking system of user trustworthiness, and dispute resolution and fraud protection. The institutional mechanisms used by eBay correspond to the two approaches in the networks and institutions as rules literature. The innovations surrounding payment established a formal set of rules and arrangements and contracts that located users more precisely. Changes to the community ranking system were designed to govern the reliability of exchange through network-based reputations. EBay implemented two types of approaches to deal with transactions that did not proceed smoothly—dispute resolution procedures relied on bringing market actors together to negotiate a settlement and fraud protection which offered a third-party, rule-based guarantee. I will now discuss each of these interventions in turn.

## PayPal: Creating a Bank for the eBay Marketplace

Buyers sent sellers money and sellers sent fees to eBay directly via mail in cash, by check or money order at the marketplace's inception. The eBay offices regularly received envelopes of cash as payments of commission rates and insertion fees. Either the buyer or seller for any given exchange had to rely on the trustworthiness of their trading partner—buyers had to send payment and then trust that the seller would send the item upon receipt or vice versa. Company employees concluded that a more efficient and secure means of payment was necessary as the amount of money grew. EBay was not the first market actor to think of this issue as several competing mechanisms for transferring money online emerged. EBay's first move occurred in May 1999 eBay when it bought and then attempted to integrate in early 2000 a proprietary online payment system, Billpoint. PayPal, a private online payment service competitor, entered the marketplace at a similar time. PayPal quickly gained traction in the eBay community in part because eBay limited Billpoint to purchases on eBay whereas PayPal allowed any individuals (and eventually businesses) to send money to others over online, secure networks. PayPal's dominance prompted eBay to purchase the company in October 2002 and adopt it as the preferred payment method on eBay.com. EBay's purchase of PayPal essentially institutionalized it in the marketplace—PayPal is an option on the majority of eBay listings and allows sellers to automatically send invoices from the eBay site. PayPal is also intended to prevent fraud in addition to providing ease of payment. PayPal members must supply a bank account and credit card information to PayPal which PayPal then uses to verify the identity of the user.

Hypothesis 1: The implementation and institutionalization of formal payment mechanisms should reduce buyer-seller uncertainty by facilitating the exchange of money. Formal payment mechanisms should increase market size through improved ease, speed, and increased reliability of one aspect of buyer-seller exchange thereby making it more likely that exchange occurs.

Hypothesis 1a: eBay's acquisition and formal incorporation of PayPal into the structure of the marketplace reduces uncertainty by validating its legitimacy and staking its reliability and security the reputation of the marketplace manager.

Feedback Forum: Making Community Measures of Trustworthiness and Reliability Public

Another major innovations in the eBay community was the Feedback Forum, started in February 1996, as a mechanism for enforcing good behavior. Omidyar's posted a letter on the site to launch Feedback Forum:

Most people are honest, some people are dishonest. Or deceptive. This is true here, in the newsgroups, in the classifieds, and right next door. It's a fact of life. But here, those people can't hide. We'll drive them away. Protect others from them. This grand hope depends on your active participation. Become a registered user. Use our Feedback Forum. Give praise where it is due; make complaints where appropriate....Deal with others the way you would have them deal with you. Remember that you are usually dealing with individuals, just like yourself. Subject to making mistakes. Well-meaning, but wrong on occasion. That's just human (Cohen 2002: 27).

The Feedback Forum is a means for eBay to induce good behavior as well as allowing buyers and sellers to signal each other. Trading hazards can be reduced by embedding transactions in networks where reputation effects work well (Williamson 1993).<sup>22</sup> All eBay users have a Feedback Score which is a numeric representation of their reputation. Feedback Scores are an aggregation or composite index of how other users in the marketplace rate an individual's trustworthiness and quality of the product. As such, the Feedback Score functions as reputation mechanism to signal buyers and sellers about the reliability and trustworthiness of potential trading partners. Although eBay instituted the method through which reputation is measured in the marketplace, it is users who generate the content.

EBay's adjustments of its feedback system have been in response to user complaints and requests as well as their own assessment of the needs of the marketplace.<sup>23</sup> eBay meets in person regularly with user groups and continuously solicits and input from users in online discussion forums (Cohen 2002). Reputation mechanisms are a means of social coordination that allow market users to assess the likelihood that an exchange partner will honor their obligations to a contract. As Carruthers and Uzzi (2000) and Resnick and Zeckhauser (2002) point out, users became uncertain as to the value and/or how to interpret the reputation score. Reputation scores are essentially an externalization of networks. In effect, they allow a participant in a given exchange to read what other network users think about the trustworthiness of potential exchange partners. Although the Feedback Forum was clearly an attempt to introduce reputation effects into the marketplace, it was not at all clear what the score represented (Cohen 2002). For example, what is the baseline feedback percentage for a reliable trading partner? 90 percent? 95 percent? 98 percent. Below are three examples of "interpretive guides" for eBay users about how to use the Feedback Score.

<sup>22</sup> David Lucking-Reiley et al. demonstrated the effects of the Feedback Forum in his article "Pennies from eBay: The Determinants of Price in Online Auctions." He showed that negative feedback led to statistically significant lower prices for sellers and that positive feedback had a more minor effect.

<sup>23</sup> eBay employees, as well as core users, invested a lot of energy in constructing what it meant to be "eBaysian"—a set of ethical rules and guidelines about how to conduct exchange in the marketplace. These guidelines are formalized in the Feedback Forum, a public mechanism by which exchange partners can rate one another's trustworthiness.

- 1. The Percentage: This is probably one of the most mis-read statistics on eBay. After all, what's the differance between a 97.5% positive feedback rating and a 99.5%? The fact is two percent doesn't sound like much but it really can be the differance between getting ripped off or having a transaction go well. So what is the differance? <sup>24</sup>
- 2. It is very important that you read feedback, but even more important that you know how to interpret feedback. Negative feedback about a seller will tell you much more than negative feedback about a buyer. That's because sellers have all the advantages on eBay. Basically, a bad buyer can do only one thing wrong, and that is to not pay for an item (or to pay late). But sellers can do many things wrong.

Amount of negative feedback. Once the buyer has sent his money to the seller, the buyer is at the seller's mercy. Thus, you should always read feedback carefully to make sure the seller is honest. If the seller has more than just a few negative feedbacks, you should not bid. This is true even if the seller has sold thousands of items. You may say to yourself, "20 negative feedbacks isn't that bad for someone who has sold 2,000 items – that's only 1%". But 20 negative feedbacks is a terrible track record...For every buyer who leaves negative feedback, there may be one or two who do not because they don't want to get negative feedback in return. <sup>25</sup>

3. The negative feedback is what you need to be looking for and anyone with a feedback score of 97% and below I would be very wary of buying from.  $^{26}$ 

Initially, users could leave feedback for other users for any reason – for helpful advice provided in a discussion forum, for a congenial demeanor in chat rooms, to ranking the performance of an individual in a given transaction. Users could engage in feedback "shilling," essentially falsely boosting their reputation scores by having friends leave them positive feedback. Conversely, individual users could be targeted by a group of users and their reputation scores driven downwards. Many eBay users and the eBay staff felt that the Feedback Score would lose its value if this continued. Thus, eBay linked the ability to leave feedback for a member to a marketplace transaction.

The increasing manipulation of the Feedback Score was not the only issue that arose for users. Feedback ratings alone are not an adequate signal of seller's trustworthiness. High positive ratings can result from large volume of small value items (numerous transactions of low-cost goods), whereas a user who has successfully and honestly completed a small number of transactions for large sums of money may not have as strong a reputation. The number of positives is effectively equal to the total number of completed transactions by a user. There is also a strong incentive to leave positive feedback, or no feedback at all in the case of a bad transaction experience; users could engage in "tit-for-tat" strategies and thus are hesitant to devalue the reputation of an exchange partner for fear of retaliation. An example below illustrates the point:

Submitted by Anonymous (not verified) on Mon, 2006-03-27 14:47.

I am leaving feedback on the TRANSACTION of the sale, not (IMHO) whether someone paid fast. There are many people who can not READ the terms of the action, get mad and strike the seller - My policy is simple and so stated, "Feedback will be left after you rate your buying experiance with us, please keep in mind we will leave the same."

Submitted by Anonymous (not verified) on Tue, 2006-03-28 14:03.

<sup>24</sup> A Buyer's Guide to Interpreting Feedback, available at http://reviews.ebay.com/A-Buyers-Guide-to-Interpreting-Feedback\_W0QQugidZ1000000000024531.

<sup>25</sup> Interpreting Feedback, Beat the Shuffles and Scames, available at http://reviews.ebay.com/Interpreting-feedback-beat-the-SHUFFLES-AND-SCAMS W0OOugidZ1000000001329016.

<sup>26</sup> A Buyer's Guide to Interpreting Feedback, available at http://reviews.ebay.co.uk/A-guide-to-EBAY-FEEDBACK-dont-get-caughtout\_W0QQugidZ10000000000951320.

What YOU are doing is being selfish, but simply being up front about it. Basically you are saying stating that you will leave negative feedback if you receive it regardless of its appropriateness.

Submitted by Anonymous (not verified) on Thu, 2007-11-22 05:52. Are you some kind of idiot?

What about people who leave immediate negatives because they don't like it arriving in 4 days when told shipping would be 5, incorrectly interpret an emails 'mood', or mistakenly calculate a 50 cent postage discrepancy all due to their 'selfish' self interest of trying to get an item at well below what anyone could buy it for wholesale at times?

Knee-jerk reaction negatives are actually part of the buying behaviour that needs to be rated as to whether was warranted correctly or not.<sup>27</sup>

The above set of problems led to a host of attempted solutions in the marketplace designed to either refine the Feedback Score system or provide alternative means for sellers to signal other users that they are trustworthy sellers. I will briefly discuss six of these changes central to the analysis later in this paper: eBay ID Verify, instituted in the third quarter of 2002, allows eBay users to go through an eBay endorsed, third-party, verification process that establishes proof of identity.<sup>28</sup> Verified users have a symbol placed on their eBay listings. EBay introduced a similar program on its eBay Motors site, Dealer Verified Sellers, in the first quarter of 2003. The program verifies a seller as a "Licensed Dealer" by having their information verified by SquareTrade, a third-party service.<sup>29</sup> In both instances, the goal is to locate these anonymous online sellers as having an off-line presence that is traceable via eBay.

EBay addressed the issue of tit-for-tat feedback retaliation in 2004. "Mutual Feedback Withdrawal", permits two trading partners, who have already agreed, to withdraw their feedback. Independent Feedback Review, unique to eBay Motors, gave receivers of negative feedback the opportunity to request that a neutral reviewer<sup>30</sup> determine if the feedback was warranted. EBay would then remove the negative score from the users feedback score if the reviewer determines that it violated its guidelines. EBay went one step further at the end of 2005 in reinforcing its written guidelines that transaction partners should negotiate with one another whenever possible prior to filing claims or leaving feedback. EBay announced that the ability to leave feedback linked would be linked to its dispute resolution services (discussed below). A user is not allowed to leave feedback for trading partners if the user does not respond to a request for dispute resolution. Lastly, eBay banned the use of non-eBay endorsed "trust seals" in the first quarter of 2006. EBay explained in its announcement that non-endorsed "trust seals" provided buyers with ambiguous, and often dishonest, information that could inhibit safe trading

EBay took several subsequent steps to formalize the process of disputed transactions and buyer protection in an effort to induce good behavior and generate generalized trust in the marketplace. In the first quarter of 2005 eBay launched the Item Not Received Process. Buyers are able to open a dispute for non-received or inaccurately described items through eBay's Dispute Console. Prior to these changes, dispute resolution was primarily conducted through informal community policing (Cohen 2002).<sup>31</sup>

<sup>27</sup> This discussion was redacted from the Brad Ideas blog at http://ideas.4brad.com/archives/000018.html.

<sup>28</sup> The service costs \$5 and is valid until a user's name, address or phone number change. Verisign provides the service for individuals, GeoTrust provides the service for certain businesses, and Deutsche Post provides the service for German members on eBay.de.

<sup>29</sup> Licensed dealers pay a one-time \$50 registration fee to SquareTrade for this service.

<sup>30</sup> Independent Feedback Review used services like the Better Business Bureau to rule on feedback removal decisions.

<sup>31</sup> eBay rolled out a significant change in the feedback mechanism, Feedback 2.0, that allows for a more detailed ranking

The Feedback Forum is a means for eBay to induce good behavior as well as allowing buyers and sellers to signal each other. Reputation on eBay is thus both generated exclusively by the community of users as well as being implemented, altered, and monitored by eBay. This dual role fits with the argument that trading hazards can be reduced by embedding transactions in networks where reputation effects work well (Williamson 1993).

Hypothesis 2: The changes in reputation system should increase market size through the externalization of network effects and improved confidence in the reliability and interpretability of the score. Reputation scores should work to reduce buyer-seller uncertainty.

## Dispute Resolution and Fraud Protection

In addition to its feedback system, eBay moved quickly after its initial public offering in 1999 to formalize efforts at encouraging heretofore anonymous trading partners to communicate directly. EBay endorsed the use of SquareTrade, an independent, privately-held company, to offer mediation services to its users beginning in the first quarter of 2000. SquareTrade offers two services: a free web-based forum which allows users to attempt to resolve their differences on their own or if necessary, the use of a professional mediator (for a fee). The hope was that users would use this service rather than engage in retaliatory feedback, file suit against eBay, or seek outside legal remedies. As mentioned above, the use of mediation services is now linked to the ability to leave feedback. EBay also introduced a Fraud Protection Plan prior to going public that provided insurance for purchases up to \$200 for each transaction.

EBay took several subsequent steps to formalize the process of disputed transactions and buyer protection in an effort to induce good behavior and generate generalized trust in the marketplace. In the first quarter of 2005 eBay launched the Item Not Received Process. Buyers are able to open a dispute for non-received or inaccurately described items through eBay's Dispute Console. Prior to these changes, dispute resolution was primarily conducted through informal community policing (Cohen 2002). Community policing provided a low-cost form of governance for the company which adhered to the founding mission by placing the resolution of violations of trust back in the hands of the involved parties and, when necessary, the broader community. The Fraud Protection Program was enhanced in the fourth quarter of 2003 with a new PayPal buyer protection plan that offered coverage up to \$500 for claims of non-delivery or significantly-not-asdescribed on qualified eBay listings that are paid for with PayPal. The PayPal Buyer Protection Plan was extended in the fourth quarter of 2004 to cover purchases up to \$1,000. The new reimbursement program insured a buyer up to \$175 for general purchases, and up to \$1,000 if they bought from a seller who met certain eBay criteria for trustworthiness. These steps clearly moved away from a distinct user-mediated dispute process and provided third-party protection to buyers and sellers.

Hypothesis 3: Dispute Resolution mechanisms should increase market size through the reduction of uncertainty in buyer-seller exchange by engaging network effects. Mediation services induce buyers and sellers to engage with one another directly and thus should reinforce the reliability of reputation scores.

of seller performance, in the first quarter of 2007. Feedback 2.0 is not included in this analysis due to insufficient time to measure its impact.

Hypothesis 4a: Fraud Protection should increase market size through the reduction of uncertainty in buyer-seller exchange by providing formal guarantees on payment.

Hypothesis 4b: The effectiveness of eBay installed rules on payment protection will be effective only to the extent that users trust that eBay will honor its commitments.

The above discussion demonstrates how market designers at eBay in conjunction with core users confronted and addressed perceived problems of the marketplace. EBay and its sellers had a strong incentive to address questions of uncertainty in online, anonymous exchanges. A crucial question remains though. Did the above efforts to incorporate secure, efficient online banking and payment, solidify an online, public reputation system, and offer formal fraud protection make the market? Theory suggests that these innovations increase market size through one of three ways. First, institutional innovations that reduce uncertainty about the trustworthiness of exchange partners or that facilitate the ease of exchange may entice new users to use the marketplace. Second, these innovations may increase the number of transactions in which existing users engage. Third, the innovations could lead buyers to bid higher amounts for items and sellers to feel more comfortable listing more valuable items. The three impacts are not, of course, mutually exclusive. Larger numbers of market participants, increased transactions by those participants, and higher closing prices should all be reflected in higher total sales in the eBay marketplace. The networks approach suggests that innovations that improved the Feedback Score and that resolved disputes through mediation should be critical to the growth of the market. Alternatively, the institutions as rules approach points to the importance of more formal payment mechanisms and banking and fraud protection guarantees as essential to the marking of the market.

#### Data and Methods

Data about the eBay marketplace comes from company annual reports, quarterly financial statements reported to the SEC, company presentations to analysts, stock analyst reports, and independent monitors of online markets (most notably AuctionBytes.com and the Online Trader's Web Alliance). I measure market size with the Gross Merchandise Volume in \$US millions (GMV). GMV represents the total value of all successfully closed items between users on eBay Marketplaces trading platforms during the quarter, regardless of whether the buyer and seller actually consummated the transaction.<sup>32</sup> Data on GMV was collected on a quarterly basis from the first quarter of 1999 through the first quarter of 2007 over 15 eBay listing categories (See Figure 2.3 for a complete list of categories).<sup>33</sup> I have complete time-series for two categories including eBay Motors, data from the first quarter of 2001 through the first quarter of 2007 for four categories (Computers, Consumer Electronics, Books/Movies/Music, Sporting Goods), data from the first quarter of 2002 through the first quarter of 2007 for seven categories (Collectibles, Clothing & Accessories, Toys, Home & Garden, Jewelry & Watches, Cameras & Photo, Business & Industrial),

<sup>32</sup> There are other ways that market growth can be measured on eBay: an increase in the number of registered users and an increase in the number of transactions. I only analyze the latter. Registered eBay users cannot be separated by market category and, unfortunately, I was not able to gather the number of transactions differentiated by eBay category.

<sup>33</sup> While monthly data starting from the beginning of the eBay (as opposed to from the company's IPO) would be preferable and allow for a longer time horizon and more precise location of market innovations and their effects, this data is not readily available. The only possible source of this information is from eBay itself and they do not release such data.

and data form the first quarter of 2005 through the first quarter of 2007 for two categories (Antiques & Art, Coins & Stamps).

Control Variables. There are two other variables that may positively effect eBay's marketplace. First, eBay's success could reflect, at least in part, people's growing comfort and access to online shopping. To account for this, I use a quarterly measure of the overall growth of e-commerce as measured by the U.S. Census Bureau eStats Division. Comparing eBay's growth to the growth of the broader industry captures the extent to which eBay's success reflects above-average returns for an emerging industry as opposed to any characteristics or innovations unique to its marketplace. As home Internet access and faster transmission speeds increased (particularly in the US) coupled with increasing access to credit cards, it is reasonable to think that people have grown more comfortable with and had easier access to online commerce. The growth of e-commerce as a whole captures at least part of this growing technical access, and comfort with online shopping and accounts for any other unobserved changes that facilitated online commerce distinct. Second, I include eBay's quarterly marketing and sales expenses to account for its ability to drive people to its site through advertising and promotional events designed to increase public awareness of the marketplace. Presumably eBay's efforts to promote its marketplace, define its brand, and gender enthusiasm should create broader public awareness of eBay.com as an alternative way to shop for all goods.

There are substantive and methodological reasons for using panel data based on eBay categories rather than the growth of the marketplace as a whole. Substantively, it is possible that interventions effect categories of products differently. For example, users may be more hesitant to engage in a transaction for high-priced items such as consumer electronics and cars as opposed to a book without the added assurance of the safety of the site. The rules and policies for eBay Motors, the site for selling cars and car parts, and some other categories vary slightly from the core listings in other categories. Methodologically, using panel data allows me to estimate the effects of all measured and unmeasured time-constant variables (Petersen 2004).

#### Results

This section presents the fixed-effects regression results from a 15 marketplace category panel over 33 quarters. I present fixed-effects estimates for four types of intervention: online banking and payment (Models 1, 1B), enhancements in the online reputation system (Models 2, 2B), dispute resolution (Models 3, 3B), and fraud protection (Models 4, 4B)—on the total volume of sales in the eBay marketplace (Table 2.2). Fixed-effects regression allows one to interpret what happens to the growth of the market, the Gross Merchandize Value (GMV) by eBay listing category, when actors implement innovations within eBay categories. The fixed-effects regressions estimate models that look only at within-category variation which is equivalent to putting in a dummy variable in for each category. Each model answers the question of whether there is a statistically significant change in the growth of GMV (measured as the log of GMV) within eBay categories due to market interventions. First, I present results from a baseline regression to allow use of the complete data set including market interventions that happened within a year of eBay's IPO (Models 1-4). Second, I present fixed-effects estimates fitting all models with a 4th order lag of GMV in order to account for the seasonal variation in eBay.com marketpace sales (Models 1B-4B). In many retail markets sales trends follow a strong seasonal pattern based on holidays and other consumer behavior patterns;

eBay is no exception to this phenomenon. Theoretically, the second set of models reflects that this winter's sales are essentially last winter's plus some variance and thus models the variance. The lag also accounts for serial correlation in the dependent variable.

Panel-data estimators for small samples, and especially when the number of groups exceeds the number of time periods yield overly optimistic standard errors, and lead to overconfidence in the results (Beck and Katz 1995). I present a third set of fixed-effects estimates using panel-corrected standard errors, as suggested by Beck and Katz (1995). Using panel-corrected standard errors adjusts for two issues: it corrects for errors that are both heteroskedastic (i.e. they differ systematically across categories) and correlated over time within categories and it accounts for the data in different categories starting in different time periods. I also estimated the effects correcting for autocorrelation in the error term. Auto confounds the error term with the effects of the lagged dependent variable which can lead to biased and inconsistent parameters of all estimates (Ostrom, 1978; Sayrs, 1989).<sup>34</sup>

Ideally, all interventions could be introduced in the same model, however, the statistical power of such a model is limited by the total number of cases represented by the 15 market subcategories over 33 quarters. The four models represent a distinct type of intervention at unique points in time and, thus, offer a reliable if not ideal, estimate of their effects. All market interventions were coded as dummy variables based upon the quarter that eBay implemented them into the marketplace. Following convention, I lag all independent variables one quarter.

Figure 2.2 provides a chart of GMV growth for the eBay.com marketplace as a whole. Table 2.1 provides descriptive data for all variables. The results are presented in Table 2.2. Model 1 includes dummy variables for two interventions in payment for eBay transactions. The first intervention was the introduction of BillPoint and PayPal as new and competing forms of secure, online payment and banking. This intervention is only tested on eBay Motors. The second intervention came after eBay's acquisition and official endorsement of PayPal as the preferred form of payment in the marketplace. This second adjustment in online payment and banking is tested across all categories except Coins & Stamps and Antiques & Art. The model demonstrates the significant, positive impact of two interventions measuring the diffusion of secure online payment mechanisms into eBay Motors sales and the entire marketplace, respectively. The results in Models 1 and 1B support Hypothesis 1. Formal payment mechanisms spur greater marketplace growth by reducing buyer-seller uncertainty in the exchange of money. There is limited support that the effect of formal payment mechanisms is the result from increased trust of the payment system once eBay formally absorbed PayPal in the marketplace structure. The shift in the earlier period from more traditional means of payment to vigorous marketplace competition between Billpoint, PayPal, other forms of online payment produce an almost 60% increase in GMV (Model 1). The later adoption of PayPal as an eBay owned and endorsed form of payment was a catalyst for an almost 100% increase in market sales. The effect of payment systems is still substantial but less dramatic when adjusting for seasonal variation in market sales creating a 22% boost in sales (Model 1B).

Model 2 assesses the effect of changes in reputation mechanisms on GMV growth. Reputation mechanisms are cited as an important form of community engagement in online markets (Resnick et al. 2000, Bajari and Hortaçsu 2004, Lucking-Reiley et al. Forthcoming). As mentioned above, eBay's Feedback rating is a conscious attempt to make reputation visible to otherwise anonymous exchange partners. EBay evolved the feedback system in partnership with users. EBay users have not been shy about providing the company with suggestions for

<sup>&</sup>lt;sup>34</sup> I do not discuss these results because they produce estimates that are substantively similar to earlier models but the estimates are available upon request.

improvement on its feedback mechanism (Cohen 2002).<sup>35</sup> I include the six changes in the feedback mechanism or alternative signals of reputation discussed above – eBay ID Verify, Dealer Verified Sellers, Mutual Feedback Withdrawal, Independent Feedback Review, Link to Dispute Resolution, and the ban on "trust seals"— in the model. The policies on eBay ID Verify and Mutual Feedback Withdrawal are tested across all categories except antiques and art, coins and stamps. The Dealer Verified Seller and Independent Feedback Review programs were only instituted for eBay Motors. EBay's decision to link the use of dispute resolution services in order to leave negative feedback and the ban on non-eBay endorsed "trust seals" applied to, and is tested across, all categories.

The results of Models 2 and 2B show minimal support for Hypothesis 2. The introduction of Independent Feedback Review on eBay Motors had a significant, positive impact on the growth of that marketplace, raising GMV over 70% in Model 2. This effect disappears in Model 2B and conversely, the eBay ID Verify program seems to have some negative impact on market growth. This counterintuitive outcome could be due to the program providing a disincentive for new sellers to enter the marketplace or through reduced bidding or final auction prices by buyers on items sold by non-verified sellers (which represents the majority of items sold). Results for the other programs and policies had a more mixed and insignificant impact. This suggests that ongoing adjustments in community feedback mechanisms and third-party verification of sellers do not boost market growth. However, changes that increase the validity of the existing feedback score for high cost items, such as cars, reinforce the usefulness of public reputation scores.<sup>36</sup>

Models 3 and 4 examine dispute resolution mechanisms and fraud protection programs respectively. These models provide insight as to whether eBay can improve individual buyer-seller exchanges as well as whether it can enhance its own reputation as a safe marketplace through improvements in its trust and safety services. I include dummy variables for eBay endorsed mediation services and the launch of the Item Not Received Process (tested across all categories except for Antiques & Art and Coins & Stamps) in Model 3. In Model 4, I use dummy variables for the introduction of the PayPal Buyer Protection Plan offering protection up to \$500 (tested across all categories except for Antiques & Art and Coins & Stamps) and the enhancement the later enhancement of this plan to insure purchases up to \$1,000 tested across all categories.

Models 3 reveals that eBay's implementation of online mediation services does not have a significant impact on the GMV growth contrary to the prediction in Hypothesis 3. In contrast, strengthening fraud protection programs and linking to the online payment mechanism, PayPal, had a significant, positive impact on market growth, increasing GMV by 6% (Model 4B). Raising the upper limit of the Fraud Protection Program produces a positive, though insignificant growth of GMV. This model confirms Hypothesis 4 generally but, as with payment mechanisms, it is difficult to distinguish whether it is the result of reduced uncertainty between buyer and seller directly, whether it reflects a degree of trust in eBay's guarantee and/or stake in the innovation, or a combination of the two.

<sup>35</sup> Also see the website Auctionbytes.com for discussions by eBay users.

<sup>36</sup> The estimates presented here test only the marginal contribution of each intervention over and above the previous ones. I looked at the influence of each one individually rather than all in the model at once as presented in the paper without any significant results. Results available from the author upon request.

#### Discussion

The above results show that mechanisms based on formal rules designed to insure exchange through third-party enforcement, insurance, or supervision are central to building of markets with anonymity as a central feature. These formal institutions limit reliance on networks and create favorable conditions for market expansion. The most important innovations – an integrated, online banking system, formal fraud protection, and third party validation of feedback ratings – all reduced the need for knowledge of an exchange partner or enhanced the credibility of networked based reputations. Each of these innovations addressed a central area of uncertainty for a group of actors through the establishment of rules of exchange in the first two instances and through changes in governance in the third. The establishment of PayPal assured *sellers* that they would receive payment. Formal fraud protection protects *buyers* in the event that they do not receive the item advertised. The strengthening of the feedback system reinforced the basis of fair competition *between sellers*.

For example, Independent Feedback Review for eBay Motors transactions is the only one of the policies aimed at reinforcing the feedback system that had a significant impact on the expansion of the market. The policy introduced the influence of an outside, third-party governance structure to determine the merit of feedback. Other mechanisms that allowed exchange partners to mediate their dispute and thus withdraw the feedback did not address problems associated with "tit-for-tat" retaliation. In essence, the feedback score may have been devalued by this step by reducing the number of negative feedbacks a user might receive. So even in a case of externalizing networks through a visible reputation score, it took the introduction of third party reviewer to enhances the validity of the reputation score. A similar interpretation fits the results for dispute resolution and fraud protection. Again, market interventions that encouraged users to resolve their differences directly or through mediation seemed to have minimal impact in making the market. In contrast, strong third party enforcement and protection of contracts through insured payments via the online banking system, led to market expansion.

This paper contributes an understanding of where market innovations come from as well as how market designers and users respond to situations where social interaction and exchange is more anonymous and fleeting. EBay's attempted solutions suggest that the anonymity of new types of emerging markets relies on the formalization of institutions in order to foster economic expansion. The conclusion about the centrality of formalized institutions for the growth of the marketplace supports a growing consensus that the creation of effective markets often rests on the expansion of rules. Market actors may themselves lobby for increased regulation in order seize new opportunities or expand their business. But these innovations are not all effective or efficient as economic theory argues. Obviously, some innovations work and others do not. It is difficult to reconcile this with the emphasis on efficiency and in much of the economics literature. Institutional foundations of markets require active negotiation and construction by market actors.

More broadly, the case of eBay speaks to the discussion about the institutional foundations of markets, the dynamics of institutional innovation, and its implications for market expansion. At the beginning of this paper, I suggested that sociologists and many economists proffer two alternative forms of governance in markets: institutions as formal governance structures and rules or networks. It is clear that problems of uncertainty in markets are ubiquitous. Consequently, decisions about whether to use network or rule-based governance or both are problems that market actors need to solve. By examining a case where market designers implemented rules-based and network-based institutions, the case of eBay highlights that rather than focusing exclusively on institutions as rules or networks, future research should try to understand the mechanisms by which one set of institutions or the other works in specific market settings. Embarking on this research will

all us to start understanding under what conditions and in what situations, networks and rules are important to the making of the market. The data presented here suggests three important dimensions: the size of the market in terms of the numbers of buyers and sellers, the frequency of exchange between the same two partners, and the anonymity of exchange partners (most common in virtual markets).

A central point that emerges from this analysis is that institutions as rules matter in cases where market actors are numerous and transactions are unlikely to be repeated. EBay, the company, emerges as a quasi-government against its initial design in order to manage relationships between buyers and sellers, resolve issues of fair competition between sellers, and reduce the uncertainty generated by geographic distance between exchange partners. EBay's role in this area shows that market rules that protect users from predatory market actors are more important than innovations that heighten the role of social networks. It may be that the number of actors in the market is the underlying feature that determines the importance of networks versus rules or whether they are viable alternatives in each case. Further research is needed to determine if this is simply a characteristic of Internet markets with large numbers of actors or if it could be effective in other contexts. For example, are there ways to develop a state-like governance structure for business groups operating in developing economies struggle with the lack of reliable and consistent governance structures?

These results are also relevant for understanding the institutional problems faced by impersonal, anonymous markets permitted through the Internet and new communications technologies. While eBay's particular solutions may not work in all markets, they provide an important look at the emergence of institutions, exploring how they changed, and measuring their impact on the market. Many of the advantages and efficiencies that do exist on eBay.com—more universal access to information, the shrinking of the geographic limitations to commerce bringing people together who would not have been in the past—are the result of the power of the Internet more than a particular set of market rules. These advantages expand the universe of potential trading partners and the ease with which individual economic actors can shop for alternative sources making one-time exchanges more common than repeated exchange.

As such, the case also provides insight into under what conditions certain rules and institutions matter. Online banking and payment appears to be a central feature of many new markets as evidenced by PayPal's rapid expansion outside of eBay.com and competitors such as Google Checkout. This is particularly true in places with minimal preexisting, reliable banks or other financial institutions. The importance of online reputation mechanisms has been widely contested with many scholars suggesting that they do not provide a major boost to market sales (cf. Bajari and Hortaçsu 2004 and Resnick et al. 2000). Yet the results from eBay show that the formalization of network reputations and validation from a third party are important for larger transactions. Perhaps mediation, too, matters more for truly large scale transactions. For example, there are a growing number of private courts and arbitration panels designed to mediate disputes and facilitate exchange in international trade.

I do not want to overstate conclusions about the role of networks. The variables used here to estimate the importance of the embeddedness of the marketplace are limited. There are many other common activity measures of online community (Cothrel 2000) including the intensity of online discussion groups, the participation of users in online forums, and the number of eBay related associations members join. <sup>37</sup> As Kollock (1999) and Kollock and Braziel (2006) demonstrate,

<sup>37</sup> I attempted to gather some of this data but was unable to do so on a quarterly basis over the necessary number of years. This information is difficult to access due to eBay's proprietary holding of data.

network-based reputation systems and social relations between intermediaries may be essential at the origins of a market or in markets with smaller numbers of actors. Networks may indeed be essential in other aspects of market construction such as for learning and knowledge acquisition (Powell 2004). As Stzompka (1999) might suggest, there is some broader dimension of how people trust that is not addressed through attempts at specific innovations that address institutional trust within a marketplace. EBay's efforts to establish a set of community values and facilitate user learning, such as eBay University, online tutorials about ethical market behavior or on how to interpret an exchange partner's reputation score, are much more difficult to measure in a study like that presented here. Much more theoretical and empirical work is necessary to better understand the conditions under which networks and formal rules facilitate market expansion and which innovations matter in given situations.

What pushes organizations from a market environment with low networks and low rules to more complicated forms of social organization? In some markets, networks and rules may work together, sometimes they may not and it is important to understand that. Further empirical studies of "markets in practice" (Kollock and Braziel 2006), particularly in the other types of markets laid out in Figure 2.1 will help to refine our understanding of the conditions under which networks and rules are effective tools for managing uncertainty.

Figure 2.1: Networks and Rules as Alternative Forms of Market Governance

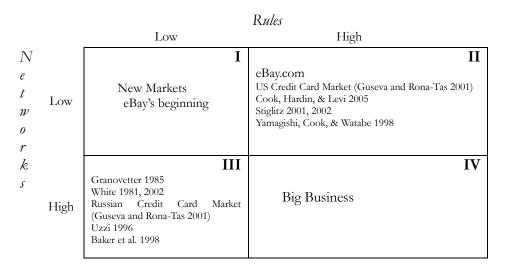


Figure 2.2: eBay Gross Merchandise Volume, 1999-2007

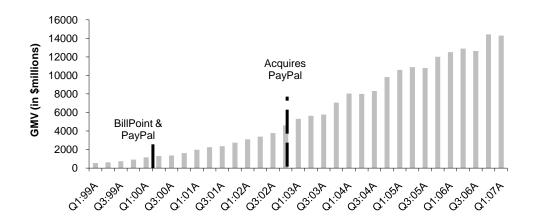


Figure 2.3: eBay Categories and Quarters for Which Data Available

eBay Motors – q1 2000 – q1 2007 Computers – q1 2001 – q1 2007 Consumer Electronics – q1 2001 – q1 2007 Books/Movies/Music – q1 2001 – q1 2007 Sports – q1 2001 – q1 2007 Collectibles – q1 2002 – q1 2007 Clothing & Accessories – q1 2002 – q1 2007 Toys – q1 2002 – q1 2007 Home & garden – q1 2002 – q1 2007 Jewelry & watches – q1 2002 – q1 2007 Cameras & photo – q1 2002 – q1 2007 Antiques & art – q1 2005 – q1 2007 Coins & Stamps – q1 2005 – q1 2007 Business & industrial – q1 2002 – q1 2007 Other categories – q1 2000 – q1 2007 Table 2.1: Descriptive Statistics

Continuous	Mean	Std.	Min.	Max.	Observations
Variables		Deviation			
logGMV					
Överall	6.1044	.7489	4.0943	8.3581	322
eCommerce					
Overall	14476.36	6607.579	4615	27498	420
Marketing					
Overall	165.4738	131.2156	16.958	439.7	495

Categorical Variables	Ov	verall	Bet	Within	
<u> </u>	Freq.	Percent	Freq.	Percent	Percent
Payment <sup>a</sup> :	•		•		
No Formal Payment	75	15.63	15	100	15.63
Online Payment:	150	31.25	15	100	31.25
Payment Competition					
Online Payment:	255	53.13	15	100	53.13
PayPal as Preferred					
Method					
Reputation b:					
Baseline	418	87.08	15	100	87.08
eBay ID Verify	15	3.13	15	100	3.13
Dealer Verified	1	0.21.	1	6.67	3.13
Sellers					
Mutual Feedback	15	3.13.	15	100	3.13
Withdrawal					
Independent	1	0.21	1	6.67	3.13
Feedback Review					
Link to Dispute	15	3.13	15	100	3.13
Resolution					
Ban on "Trust Seals"	15	3.13	15	100	3.13
Dispute Resolution <sup>c</sup> :					
No Mediation	450	93.75	15	100	93.75
Services					
Mediation	15	3.13	15	100	3.13
Item Not Received	15	3.13	15	100	3.13
Process					
Fraud <sup>d</sup> :					
No Protection Plan	<b>45</b> 0	93.75	15	100	93.75
PayPal Buyer	15	3.13	15	100	3.13
Protection Plan					

Table 2.2: Fixed Effects Models of Institutional Innovation on the log of Gross Merchandise

Volume on 15 eBay.com categories from 2000-2007

Volume on 15 eBa	Model 1	1B	Model 2	2B	Model 3	3B	Model 4	4B
Payment <sup>a</sup> :								
Online Payment:	.586**							
Payment	(.192)							
Competition	,							
Online Payment:	.976***	.221**						
PayPal as Preferred	(.202)	(.037)						
Method	()	( /						
Reputation b:								
eBay ID Verify			.054	156**				
•			(.109)	(.056)				
Dealer Verified			.601	003				
Sellers			(.383)	(.133)				
Mutual Feedback			.197	.049				
Withdrawal			(.109)	(.037)				
Independent			.715*	.066				
Feedback Review			(.204)	(.134)				
Link to Dispute			138	007				
Resolution			(.109)	(.038)				
Ban on "Trust			181	.027				
Seals"			(.111)	(.040)				
Dispute Res. c:								
Mediation					443			
					(.277)			
Item Not					.052	022		
Received Process					(.103)	(.038)		
Fraud d:								
PayPal Buyer							.266*	.060**
Protection Plan							(.107)	(800.)
Extension of							.162	005
PayPal Buyer							(.102)	(.004)
Protection Plan							` ,	,
Lag4 logGMV		.536***		.514***		.509***		.511***
		(.023)		(.024)		(.024)		(.024)
Ecommerce	.000	.490**	.000	.509 <sup>°</sup>	.000	.472	.000*	57Ó
	(.000)	(.170)	(.000)	(.185)	(.000)	(.176)	(.000.)	(.134)
Marketing	.003	.432***	002	.729***	.002	.725***	.002	.715***
O	(.001)*	(.110)	(.001)	(.110)	(.001)	(.106)	(.001)	(.110)
Constant	4.540	5.366	-4.889	7.234	4.960	6.930	4.869	6.807
Constant	(.207)	(1.112)	(.153)	(.110)	(.149)	(1.172)	(.147)	(1.220)
Residual Variances:	(.201)	(1.114)	(.133)	(.110)	(.17)	(1.1/2)	(.17/)	(1.220)
Variance of fixed	.3831	.3831	.3695	.3695	.3825	.3825	.3807	
	.5051	.5051	.5095	.5095	.5045	.3043	.3007	
effects Residual variance of	1260	1270	1 / 1 1	1 / 1 1	1.4.4.6	1.446	1.410	
	.1268	.1268	.1411	.1411	.1446	.1446	.1419	
within-individual								
error term								

<sup>\* 232</sup> total observations

<sup>†</sup> All independent variables are lagged one quarter (Estimated Standard Errors in Parentheses)

<sup>&</sup>lt;sup>a</sup> The reference category represents no formal payment mechanism

b The reference category represents eBay's initial Feedback system c The reference category represents no formal mediate system

<sup>&</sup>lt;sup>d</sup> The reference category represents no protection up to \$200

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001

# Chapter 3

# The Battle for the Soul of the Market: eBay and The Politics of Market Design and Management

The setting: eBay Live! 2005. A three day celebration of the eBay community. Four top eBay executives, perched on stools at the front of the room providing a special open access meeting for eBay PowerSellers (accomplished sellers with a high volume of complete transactions). As the question and answer session began, the first question galvanized the crowd:

eBay Seller: You always talk about working together as a community...that we are not in competition. And yet, half of this conference has been about introducing new features for sellers that pit us against each other. If you really believe that your success is based on ours and that we should work together, why don't you devise systems that help everyone...?

eBay executive: Well, we track our metrics very carefully. So we feel that the additional features that we offer to sellers at a fee return a greater value in the final sales price. Our policy is that a new feature should return at least three times its value to the seller...These features are optional.

Seller: That's bullshit. The features are not optional. They are mandatory if...sellers want to compete.

This exchange catalyzed an hour long debate between frustrated sellers and the executives at the front of the room. It highlights the growing tension and diversity of interests that eBay confronts in changing market rules, maintaining its stated commitment to a level playing field for sellers, and adding new market features and formats.

Chapter 2 looked at the technical innovations designed to address the horizontal relationships between buyers and sellers in a given exchange. While the implementation of online payment mechanisms and reliable reputation systems can be understood as technical fixes, they were followed closely in importance by the introduction of new market formats and fee structures. In this chapter, I look at the formation of seller associations and trade unions, the role that they play in the production of market rules, the definition and development of market morality and culture, mediating competition and how their understandings of market shape their advocacy role. Dealing with the uncertainty and risk around buyer-seller exchanges is a fundamentally different problem than managing competition between diverse groups of sellers.

Political organizations and groups interacting to make market rules—often characterized as incumbent-challenger relationships—are central to understanding market dynamics (Dobbin 1994; Fligstein 1996; Hodgson 2002; North 1981, 1990). These vertical relationships between eBay and its seller community involve issues of power and compliance, often coerced through formal or informal rules. Why seller groups organize and what they do, how they interact with eBay as governance structure, how they understand and perceive market rules reveals one push factor on the development of market institutions. Sellers group seek to define the conceptions of control (Fligstein 1996). To do so, they strive to frame key debates—about changes in fee structures and market formats—within the broader context of the core values of the eBay marketplace. The strategic action of these market participants is an attempt to define legitimate market rules and behavior and the technical design and format of the marketplace (DiMaggio 1989; Swidler 1986,

Fligstein and McAdam 2010). Market institutions are not all about efficiency, or value neutral. They impact different market actors in different ways – changes in formal or informal market rules can mean something different for small sellers and large sellers. The sociology of markets suggests that economic actors form political coalitions, constantly lobby for governance, seek to define a conception of control, and that laws and accepted practices will often reflect the interests of most organized groups in the market (Fligstein 1996).

From the beginning, eBay trumpeted the presence of a level playing field for all sellers. The company often invokes the idea that eBay is in partnership with its user community. But changes in market formats are not neutral vis-a-vis marketplace users. The diversification of the seller community, driven in large part by changes in market format, has made this alliance and symmetry less stable. EBay's ability to manage the diverse group of sellers entering its marketplace while retaining buyers became more complicated as the marketplace expanded. The development of new market formats, most prominently the "Buy It Now" option and fixed-priced sales, led to a continued increase in market size and shifting market structure away from used items and collectibles. Market growth fostered and was catalyzed by a change in the marketplace from a venue for person-to-person auctions into a platform for small and medium size businesses. An entirely new seller category of eBay middlemen—drop-off stores, trading assistants—the introduction of eBay storefronts, the growing use of the site by traditional retailers such as Best Buy and Hewlett- Packard, the presence of other Internet e-retailers such as buy.com and the formation of sellers groups and trade associations emerged. EBay market rules and innovations have tended to favor growing market sectors. The growing market share held by large sellers, competition from other Internet companies, and pressure from investors, is increasingly threatening the core eBay value of a level playing and leading seller associations to contest its meaning.

Earlier I argued that there are three essential types of relationships that explain the driving forces in eBay's development—the horizontal relationships between buyers and sellers that revolve around the uncertainty of exchange in online contexts; the vertical relationships between eBay and its users; and the horizontal competitive relationship between eBay and other eCommerce firms. Here, I take up the vertical relationships between users (primarily sellers) that are critical in shaping market rules, structure, and shaping competition. These vertical relationships involve issues of power and compliance, often coerced through formal or informal rules.

Market expansion, increasing complexity, and a rapid growth in formal market rules have generated the need for elaborate governance structures in addition to fluctuations in barriers to entry for sellers some sellers. The central substantive question I address in this chapter is why eBay shifted from a market platform predicated on individual sellers, competing on a level playing field, selling items in online auctions, with a public community reputation system to a venue for small to large businesses, competing within a hierarchy of seller prestige, generating greater than 50% of GMV through fixed price sales, and a hybrid public-private reputation system. I demonstrate that external shifts in buyer preferences and internal shifts in the composition of the eBay seller community were mediated through the dynamics of the above sets of relationships and drove the changes in the marketplace from its emergence, to its era of relative stability to its ultimate transformation of the marketplace. EBay found itself in similar position as firms in more traditional production and supply chain industries of managing and coordinating the quality and distribution of goods in its marketplace but also by trying to coordinate the quality of service delivered to buyers. This discovery ran counter to the company's initial self-perception as eliminating the barriers to entry for small, individual sellers and connecting them to same buyers are larger firms.

#### The Politics of Markets

The internal politics of the eBay marketplace reflect broader changes in the way that firms are organizing around online-enabled global markets and the governance structures used to manage the chain of companies between the production and marketing of a product and the final buyer. In this section I lay out two strands of research—the study of the relations between lead firms and their suppliers and the sociology of markets and institutional change—and attempt to synthesize these approaches to make sense of the evolution of eBay.

One of the research agendas for scholars of modern production markets is describing and explaining the changing organization of production and the relative power of lead firms and firms down the value chain. Three primary types of value chain governance emerge from this research: markets, organizations and networks, and hierarchies. The traditional problem in the literature was a binary division where firms would organize activities through markets or within the firm itself (Williamson 1975). In the perspective of transaction cost economics firms face a binary decision of evaluating the investments specific to a transaction; where these investments are easy to determine because products or services are standardized and easily replicated firms engage in arm's-length market exchange. In cases where the product or service are more customized or unique to the needs of the lead firm and require greater coordination between transaction partners, then firms bring activities inside the firm to avoid opportunism and reduce the costs of coordination (Fine, 1998; Langlois and Robertson, 1995).

Network theorists acknowledge the reality of transaction costs but demonstrate that these costs can be addressed through alternative governance arrangement particularly for repeated exchanges (Granovetter 1985; Jarillo 1988; Lorenz 1988; Powell 1990; Thorelli 1986). Lead firms can manage inter-firm relations through trust, reputation, and mutual dependence. This third method of governance implies a broad range of possible relationships between lead firms and their suppliers outside of markets and hierarchies. These studies point to emergence of large retailers like Wal-Mart Stores Inc. and brand managers like Nike that focus on a core strategy and aim to coerce suppliers to produce cheaper products on a limited time scale (Gereffi 1994; Humphrey and Schmitz 2000, 2002). Gereffi, Humphrey, and Sturgeon (2005) develop a set of ideal-types from markets to hierarchies with three networks forms of governance in between: modular, relational, and captive. The differences in governance structures across these ideal types is a product of the complexity of transactions, the codifiability of information, and the competency of suppliers. The simpler the transaction, the existence of codified information, and the higher competency of suppliers allows for more modular governance structures where suppliers make key investments in skills, technologies, and processes in order to work with suppliers or groups of suppliers. Conversely, captive value chains exist when supplier competence must be developed by the lead firm and transactions involve repeated and complicated exchanges between parties often with the exchange of proprietary information. In this instance, suppliers are transactionally dependent on buyers, switching costs are high and lead firms exert a high degree of monitoring and control over suppliers. These dynamics vary across industries and over time. For example, the US electronics industry evolved from a set of hierarchical arrangements where vertically integrated firms like RCA and IBM engaged in most activities from production, transport, and distribution in-house to more contractbased manufacturing in the 1990s (Gereffi, Humphrey, and Sturgeon 2005). Firms initially started outsourcing the production of components such as computer monitors and disk drives and then removed themselves almost entirely from manufacturing and focusing instead on innovation and design (Sturgeon and Lee 2001; Sturgeon 2002). In this more modular value chain, suppliers can be contracted as needed for a given project but it may require the sharing of intellectual property and price information.

Neither the approach in transaction cost economics or the network mechanisms of the global value chain approach quite captures the dynamics of emerging online markets. In transaction cost economics, extensive management or coordination of suppliers leads to moving operations with the firm and does not offer a theory of managing a supplier community. For many firms creating online marketplaces or alternative models of commerce, the business model is designed to precisely remove the lead firm from taking on the tasks of production, distribution, or direct coordination. Instead, as with eBay, the aim is offer a venue to connect buyers and sellers. Online entrepreneurs developed a variety of systems to aggregate buyers and sellers online such as price aggregators--mysimon.com, pricewatch.com, bizrate.com, pricegrabber.com—or marketplaces such as eBay and Amazon that, at least in theory, relied less on managing a supply chain. Part of eBay's innovation, and one for which it was publicly lauded, was that they never saw themselves as holders or makers of product and hence never viewed their decisions as about issues of transaction costs. While the network approach addresses some of this complexity by examining the relative power and capacities of different actors in the supply chain, it does not account for the emergence of these new venues of exchange in which the lead firm is not necessarily capable of exerting explicity coordination over its seller base. Firms in these situations look something closer to democratic states where internal politics and "votes" influence the structure of the relationship. Online marketplaces such as eBay launched markets that did not exist prior to that point and had to figure out how to solve similar problems to supply chain management in the coordination of market actors. The challenge in these new markets was not only about the product but also about inducing seller communities to provide a certain diversity of products and a certain standard of service.

The institutional perspective on modern production markets grapples more directly with the politics of markets and provide greater leverage on the question of how market actors negotiate to influence to the structure of the marketplace. Scholars from institutional perspective argue that markets are characterized by incumbent-challenger relations between producers, that market structures are socially constructed, and that the negotiation of market institutions is designed to mitigate the effects of competition, increase stability, and maintain the privileged position of dominant producers (Fligstein 1996; Hodgson 2002). This conception of markets implies a political dimension where actors seek to define rules and market structure in order to ensure stability. This generates a different set of propositions than the economics literature or the markets as networks approach about how markets will form. For example, the creation of market rules will favor incumbent sellers over challenger sellers and will involve political lobbying. Social institutions do not exist solely to lower transaction costs but also to provide actors with a set of cultural tools to interpret actions within the market.

Institutions are thought to be crucial for the stability of markets. Institutions can be formal constraints—specifically devised and codified rules--or the informal constraints of conventions and codes of behavior. Fligstein (1996) posits four such social institutions as necessary for stable markets: property rights, governance structures, rules of exchange, and conceptions of control. The rules of exchange define who can transact with whom and the conditions under which transactions are carried out. Market actors must solve the problem of defining legal and illegal forms of competition (Fligstein 1996, 2002). Baker et al. (1998) suggest that network structures in relationships between advertising agencies and their clients constitute the rules of exchange; the precise nature of these relationships, the rules of exchange, can change over time – in this case from fixed-prices to exclusivity, to loyalty. These market institutions are politically contested and establish the boundaries for market operation—what actions are possible and how other actors will interpret those actions. A conception of control refers to a world view that allows actors to interpret the actions of others and a reflection of how the market is structured (Fligstein 1996, Hodgson 2002). Conceptions of control are important to the maintenance of stable markets because they establish

the ground rules for fair competition. Cultural differences lead to a different understanding of the same market (i.e. corporate culture, cooperation with competitors—cartels, price controls, barriers to entry, limiting production, patents, licensing agreements). Numerous studies demonstrate how locally specific constellations of actors and institutions shape and constrain the structure of markets (Evans 1995; Hall 1986; Locke 1995; Soskice 1999).

Scholars treat the emergence of new markets and the transformation of stable markets as a social process akin to social movements (Fligstein and McAdam 2010; King Unpublished Manuscript; Hannan, Polos & Carroll 2007). Early market entrants seek to mobilize new categories and collective identities as a means of establishing new producers, providing a basis for actors to coalesce, reducing the uncertainty and risk of the new venture, and establish the goals of the new market (Weber, Heinze, and DeSoucey 2008; Lounsbury & Glynn 2001; Sine, Haveman, & Tolbert 2005). The strategic action of market participants in these early stages is an attempt to define legitimate market rules and behavior and the technical design and format of the marketplace (DiMaggio 1989; Swidler 1986, Fligstein and McAdam 2010). Market actors often influence the development of the regulatory framework in a effort tilt the playing field (Braithwaite and Drahos 2000; Fligstein 2001; Murphy 2004). Part of this definitional process can involve the clear demarcation of how the new market format differs from existing platforms of exchange and ways of doing business (Swaminathan and Wade 2001; Swaminathan & Carroll 1995; Carroll 1997; Carroll & Swaminathan 2000; Swaminathan 2001; Dobrev, Kim & Hannan 2001). For example, Greve, Pozner, and Rao (2006) demonstrate the importance of oppositional identity in corporate concentration of FM radio industry to create new niche of low-power FM radio stations. The collective mobilization of actors in opposition to existing business practices provides market entrepreneurs an infrastructure, collective identities, a share project/goal, and new organizational model. One outcome of these processes is that new market entrants cooperate rather than compete with each other because of their shared goal of establishing a new marketplace (King and Pearce, Forthcoming).

It is possible to construct a definition of stability and change using the above arguments about the main institutional features of markets and the political dynamics of internal market actors (Fligstein 2001). Stability entails a stable category of incumbent and challenger firms in terms or organizational structure and operation. The individual firms may change only to replaced by a competitor that operates in much the same manner as with mergers and acquisitions or the taking of market share by one firm without the use of a fundamentally different business model. Actors in stable markets should share a conception of control that outlines the nature of competition and a shared view of appropriate market behavior including informal codes of conduct). One way to understand this empirically is to identify clear attempts to change the underlying definition of a market including its principal activities and ways or organizing buyers and seller. There should be a clear mobilization of incumbent firms to maintain and enforce the conceptions of control. The ability of incumbent firms to resist challenges to market institutions should hold true even in the presence of challengers with greater resources. Observing failed attempts to transform a market and the active maintenance of incumbents provides a clear sense of the boundaries and stakes of a field. In short, shifts in the identities of either challenger or incumbent firms in isolation do not mark change in the field; rather, new categories of market actors must emerge accompanied by a corresponding shift in conceptions of control or the boundaries of the market. It is possible that changes to a market, its products and production evolve over time in stages..

Change in markets are thought to come from three areas (Fligstein 2001). Internal shifts in buyer demands and preferences or the entrance of new market challengers can lead to a reorganization of the market as firms try to adjust to the new environment. Exogenous shocks or a punctuated equilibrium outside of the market can destabilize existing arrangements. State or political

intervention in the regulatory or incentive structure can alter the terrain of a market by changing the rules of the game and forcing market actors to adjust their operations to the new terrain. Whether markets reach relatively stable arrangements or are in a constant state of flux and dynamism is an open question (Powell et al. 2005; Stark and Vedrez 2006). One of the challenges for scholars of markets is to clearly define stability and define clearly what constitutes a change to a given market arrangement (Fligstein and Dauter 2007).

While changes in buyer preferences are put forth as one source of market transformation they are often conceived as exogenous factors which do not get sufficient attention in empirical analysis. Scholars consequently focus on either relationships between suppliers and customers or niche partitioning. Supplier-customer relations are thought to be about trust indexed through direct network ties that reflect ongoing social relationships between buyers and sellers (Baker et al. 1998; Uzzi 1996, 1997). Niche partitioning (Carroll 1985; Carroll and Swaminathan 2000) is another way that buyers are incorporated into market dynamics but only tangentially. White (1981; 2004) implicitly acknowledges buyer preferences through the concept of market niche and in suggesting that producers have an upstream (towards suppliers) and downstream gaze (towards consumer). Yet, his approach is devoid of the manner in which buyer preferences are interpreted by firms directly.

Alternatively, buyers are included in studies of consumption (Bourdieu 1984; Csikszentmihalyi & Rochberg-Halton 1981; Slater 1997; Zelizer 1983, 1994, 1997; for review papers see Zelizer 2005, Zukin & Smith Maguire 2004). These studies, in contrast, emphasize the cultural component of consumption without always connecting it to a larger perspective on how it relates to the structuring of larger consumer markets where buyers are individuals. The dynamic between the producers and consumers in the formation of market institutions is central in many types of modern markets (Cetina and Bruegger 2002).

I argue that it is not just a more cultural approach to consumers that is important. Many emerging market models and business enterprises revolve around customers that also serve an essential role in the success and profits of the firm (c.f. Apple, Google Android, and Microsoft's apps marketplaces). In these markets the ultimate success, stability and construction of the marketplace depends on third-parties to add value (the degree to which the market designers attempt to control this process is a central point of difference in the various models). How actors attempt to manage this double layer of buyer/customer preferences is important for understanding how they solve problems of competition. Conceiving of changes in buyer preferences as exogenous to market dynamics as opposed to incorporating it as central component of marketplace politics suggests that they are a fixed and homogeneous set of changes. In contrast, it is possible that market actors make choices that privilege the preferences of some groups over others in part in response to competition. The question of how to respond to shifts in consumer demand is one of interpretation and can be contested by market actors.

In the next section, I present the case of eBay.com as one of market emergence, stability, and transformation. I establish that there has been a fundamental change in the market including a shift in the market categories (primarily from collectibles to a diverse online mall), market formats (from auction pricing to an auction/fixed price mix), market actors (from individuals to small- to medium-sized business, and ultimately large sellers), and a change in the conceptions of control (from a moral justification for the market design as a level playing field with eBay and its sellers as partners in transforming retail commerce— to equality of opportunity for sellers and tiered seller rankings).

### eBay as Pseudo-State: Managing Competition between Diverse Groups of Sellers

EBay is an example of a new type of market and firm organization that relies on the performance of its customers to generate profit and organize the marketplace (Lewin Unpublished Manuscript). EBay's unique conglomeration of sellers & buyers, and the need to manage the sellers in particular, puts them in a unique category of emerging business models in which the original firm is essentially designing, creating, and selling a platform on which other firms can build—i.e. Apple's iPhone & iPad, Google's Android, new market for eBook readers & potential for magazines and multimedia. How companies manage this group of sellers is integral to their success—in essence, they cannot do well if their ecosystem of sellers does not do well. EBay must ensure that users—both buyers and sellers—have a positive experience in its marketplace in order to maintain its network advantage. Thus, Meg Whitman, the CEO, has described eBay as "one part company, one part town-hall meeting, and one part entertainment" (*Economist* 2004: 10).

The analysis of the political struggles among different groups of sellers to define the market, by which I mean efforts to delineate appropriate forms of competition and to influence market rules, suggests that notions of efficient markets and fair competition are contested. Seller associations serve as networks that generate innovations and reinforce market cultures and logics. The validation of social institutions are essential in structuring and legitimating market transactions.

Lower barriers to entry in online markets also make it easier for larger market actors to enter and then co-opt market direction. So, lower barriers to entry are not always about equality. Original eBay sellers were unable to solidify their vision of the morals of the market. Their definition of "level playing field" lost out. They were able to win earlier battles when eBay tried to introduce special privileges for Disney, but ultimately were unable to maintain influence. Omidyar's foundational principles of eBay included this utopian ideal of equality within the marketplace. Yet, eBay employees responsible for implementing marketplace structure and interacting with eBay users had no clear understanding of what that meant in practice. The marketplace evolved as eBay managers and the seller community collectively tried to solve pragmatic problems of market development. More recently, Omidyar described the level playing field concept as being about equality of opportunity—that is, that any eBay user who plays by the rules has equal access to any marketplace mechanism. What does this mean in regards to the privilege of new diamond sellers to negotiate special prices? Although Omidyar explicitly said that that would violate his vision, eBay explains this change as simply another market opportunity available to all provided they meet the high standards set for Diamond Sellers.

If the literature about social movements and market formation are correct, we would expect that the early phases of eBay would mark a time of collaboration and a collective attempt to define the marketplace, determine appropriate behavior, and alert potential consumers/buyers to the possibilities of the new form. In this sense, eBay's early adopters that committed to its mission and the guiding principles as put forth by Omidyar, were institutional entrepreneurs seeking to transform the buyer-seller relationship.

The decision to allow fixed price sales at the end of 2000 fundamentally altered the dynamics of the marketplace. While eBay introduced fixed price sales as a somewhat spontaneous response to buyers who wanted to purchase items in time for Christmas, many business sellers did not want to wait for the time of an auction nor deal with the hassles of fluctuating sales prices. The auction only format limited their volume of sales. Adding these two new ways of purchasing items met the requests of small and medium size businesses with large stock.

Seller communities responded strongly to the changes in market format based largely on their position in the marketplace. The diversification of the seller community, driven in large part by changes in market format, has made this alliance and symmetry less stable. EBay market rules and innovations have tended to favor growing market sectors. The company, by its own admission, tends to measure everything and make decisions that benefit the marketplace as a whole. Thus, the sectors that represented much of the core eBay market at its inception such as collectibles, are no longer as influential. The growing market share held by large sellers, competition from other Internet companies, and pressure from investors, threatened this core eBay value and ultimately rendered it inoperable.

Larger sellers have additional benefits besides their ability to coordinate, streamline marketing materials, and have additional resources to use market tools. Reputation effects have another layer on eBay. An important element of the construction of the eBay marketplace is the creation of identities/reputations and initial users had to earn them over time and often through participation in community sites. Intense debates about the inclusion of other bricks-and-mortar companies on eBay and about how users use the Feedback Forum can be understood as debates about what constitutes fair competition. The cultivation and development of a reputation (through the Feedback Forum) was viewed as a critical element of being successful. One way for major companies to get noticed online is to offer goods and services through existing sites such as eBay, Yahool, and Amazon—all of which are becoming large trading platforms for other companies. Some actors, like the big chains, are able to carry their reputations with them from the non-virtual world, but individuals on eBay have to establish their reputations and identities online. The consequences of this debate are not simply about ensuring the reliability and effectiveness of monitoring. These are debates about how the market should be structured; in other words, eBay users are lobbying the company to resist what they perceive to be changes in the rules of the game.

## The Formation of Trade Unions and Seller Associations: The Battle for the Soul of the Market

Groups of eBay sellers began to organize for collective action as the diversity of market categories and formats increased. The sociology of markets suggests that economic actors form political coalitions, constantly lobby for governance, seek to define a conception of control, and that laws and accepted practices will often reflect the interests of most organized groups in the market (Fligstein 1996). Coalitions of online traders, such as the Professional eBay Seller's Alliance (PeSA), the Online Trader's Web Alliance (OTWA), AuctionWatch/Vendio, and The Auction Guild (TAG) formed in order to collectively voice the interests of their respective seller populations. These associations have lobbied eBay to impose, retain, and remove certain governance structures. The interaction between these associations and eBay and the consequent governance structures imply a different dynamic than that portrayed in transaction cost economics.

I look at the formation of these seller associations and trade unions, the role that they play in the production of market rules, the definition and development of market morality and culture, mediating competition and how their understandings of market shape their advocacy role. As the markets as networks literature suggests these groups collaborate with one another—sharing resources and knowledge of successful online trading. Sellers share ideas about selling, creating a set of best practices, or interaction over a common interest, as well as more technical information about how to exchange on eBay through online discussion groups and forums and through established trade unions. As the markets as performance perspective suggests, these groups operate with specific models and ideas about how online exchange should operate. As such, the cultural understandings of these groups is critical in informing their debates with eBay, the company, and other seller associations. They are key sites for debates about ethical market behavior and rules and ultimately for what the market should be. These networks function as ascaffolding through which market logics and cultures are created, disseminated, and diffused.

The type of market activism and social movement type vision in which these associations engage does not fit neatly into the story of the perfect market. Coalitions, such as PeSA and TAG have clearly and repeatedly lobbied eBay to impose, retain, and remove certain governance structures. PESA's expressed intent to lobby eBay and politicians at various levels and its efforts to gain competitive advantages through means not readily available to individuals and smaller sellers. Debates about market formats in rules are reflective of these organizations' efforts to engage eBay in defining the specific culture and ethic around interactions on eBay (an "eBaysian culture"). The companies early efforts to construct and cultivate its libertarian philosophy and vision of community had to contend with competing ideas from new, powerful market entrants.

Next, I detail four major trends in the eBay marketplace resulting from the dynamics of the relationships discussed above. First, eBay's marketplace expanded rapidly as market actors and the company solved certain technical problems including payment, diversification of categories, and initial mechanisms for establishing trust. Second, the development of new market formats, most prominently the "Buy It Now" option and fixed-priced sales, led to a continued increase in market size and shifting market structure away from used items and collectibles. Third, the eBay marketplace shifted from a venue for person-to-person auctions into a platform for small and medium size businesses. This shift was marked by an entirely new seller category of eBay middlemen—drop-off stores, trading assistants—the introduction of eBay storefronts, the growing use of the site by traditional retailers such as Best Buy and Hewlett- Packard, and the formation of sellers groups and trade associations. Fourth, eBay's success and the growth on e-commerce in general has led to an increasing competition from alternative market formats.

## Rapid Growth and Increasing Social Organization

The transformations in the eBay marketplace have occurred over a remarkably short amount of time, just over ten years. Current shifts in the marketplace indicate that the site will move further away from its core auction model and closer to that of its online e-commerce retailers—or even brick and mortar stores and malls. Many of the advantages and efficiencies that do exist—more universal access to information, the shrinking of the geographic limitations to commerce bringing people together who would not have been in the past—are the result of the power of the Internet less than a particular set of market rules often referred to as the perfect market.

The growth of the eBay, both domestically, and internationally, has been nothing short of remarkable. The site currently has an online marketplace in 32 markets and is host to approximately 192.9 million registered users, 75.4 million of whom are said to have been active in the past year. EBay is the leading e-commerce site in nine of the top ten markets—Germany, the United Kingdom, South Korea, Australia, France, Italy, China, Canada, and the USA. As of its 2004 annual report, eBay claims that more than 430,000 users in the United States make all or some of their livelihoods through selling on the site. These users exchange over US\$34 billion a year in Gross Market Value (GMV).

Market expansion, increasing complexity, and a rapid growth in formal market rules have generated the need for elaborate governance structures in addition to increased barriers to entry for sellers. Jim and Crystal Wells-Miller, the founders of the Online Traders Web Alliance (OTWA), responded in the following way to a question about the changes in online merchandising on ebay:

"We [online merchants] are in a better position when it comes to mainstream acceptance of the industry as a whole. We have services, tools, programs, and tons of information that can help, a lot of this did not exist 5 years ago...There is so much going on at any given time that we often fall victim to

information overload. Competition is much fiercer; it is much more difficult to sell now than in the past. Selling online has become so complicated that it is no longer easy to do. At one time, the listing form on eBay was one page, and the selling rules were minimal. Auction management applications and tools are no longer a luxury, but a necessity. Five years ago, you could start to sell online in a matter of minutes, now the learning curve is so high it takes a major commitment of time just to get started. Let me elaborate. EBay's user agreement is about 4,500 words long (7 pages), add another 1,500 words for the fees and credits policy (7 pages), add another 70-100 pages for the "prohibited and restricted items" policies, another 70-100 pages for their listing policies, another 5 pages for their outage policy, another 3 for their board policies, another 40-50 pages for their investigations policies,... Well, you get the idea, 200-300 pages of not just reading, but policies that you have to adhere to if you want to sell online. Then, just about the time you get it mastered, something major changes and you have this huge adjustment to the way you have to do things. (Interview with Auctionbytes.com, July 25, 2004).

The above passage highlights several transformations. The role of online applications and tools provided by eBay and other services that allow for easier and smoother online transactions in general. Second, the pressure of increasing competition and the need to use new market management tools and services as more and more sellers take advantage of the growing world of ecommerce. Third, the increasing complexity of entering the eBay marketplace as the rules expand.

There were two other key components to the original formulation of the marketplace. First, Omidyar designed eBay as a community, not just a shopping site. Second, and related, is that Omidyar imagined that by creating a community he could reduce the need for governance structures. The practical reasons for community in the inception of the company were that it made users more self-sufficient and reduced demands on Omidyar's time. He also had a normative and moral vision of exchange within a community. Omidyar believed in the social contract that people operate according to moral values and that they are basically good and that given a chance to do right, they will. EBay engaged in a conscious effort to create an eBaysian culture, a market culture and ethic around interactions in the marketplace based on spirit of cooperation, equality, and fair play and where sellers succeeded through their innovation and industriousness; this moral/ethical view of a market libertarian philosophy of the community itself had to be constructed and cultivated primarily through the organization and collaboration of a committed seller community. The company went to great lengths to cultivate community on it site. In the early days, staffers routinely sounded off on the site's bulletin boards using pseudonyms, even denying that they worked for eBay when asked (Cohen 2002).

One issue that appears to have remained constant is eBay's unwillingness to act a regulator or to directly intervene in individual transactions. Yet eBay has clearly done so, not only by offering services such as dispute resolution and being the final arbiter of who can use the site, but also my actively engaging and managing seller communities and making decisions about market formats and ultimately setting targeted guidelines and standards for acceptable seller behavior.

EBay has several levers through which it can influence market composition—the types of sellers, the composition of listed items, and the format with which sellers list items. They have the fee structure—insertion fees and final value fees being the primary levers (which can vary not just in total percentages but also where they take effect (i.e. removing or lowering insertion fees for auction listings started at various price levels)—they adjust the manner in which potential buyers see search results (advent of Best Match, preferred listing for top-rated sellers vs. ending soonest). They also generate revenue through other types of fees on product listings which affect the buyer experience in the composition/professionalization of item listings.

#### New Market Formats: Fixed Price Sales

As the eBay marketplace has matured it looks more like the retail world at large. While the implementation of online payment mechanisms and PayPal in particular can be understood as a technical fix, it was followed closely in importance by the ihntroduction of fixed price sales into the eBay marketplace. A shift in the basis of the business from auction to fixed price sales has sparked a movement towards mainstream retailing.

Bay purchased Half.com, an e-commerce site focusing on fixed price sales in July 2000 and launched the Buy It Now feature in November 2000. Many business sellers did not want to wait for the time of an auction nor deal with the hassles of fluctuating sales prices. The auction only format limited their volume of sales. Adding these two new ways of purchasing items met the requests of small and medium size businesses with large stock. EBay also touted the value of these new features to consumers: "Our acquisition of Half.com in July 2000, and the implementation of our "Buy it Now" fixed price feature on eBay.com, have expanded our marketplace by attracting a new consumer demographic and accelerated the velocity of trading by reducing the length of time between listing an item and completing the transaction" (2000 Annual Report).

Fixed price sales represent a significant and growing share of total sales in the eBay marketplace (Figures 3.1 and 3.2). Fixed price sales accounted for 34 percent of GMV in the first quarter of 2006. These fixed price sales represented approximately 30 percent of the total payment volume in 2004. However, fixed price items are growing at a more rapid rate compared to auction sales. Gross merchandise sales for fixed price sales grew 106.3 percent in 2003 versus 47.4 percent growth for auctions. In 2004 the growth rates were 50.1 percent and 41.3 percent respectively. The growth rate for both categories is expected to slow considerably in coming years but fixed price sales are expected to continue their more rapid growth.

The shift in format had two predominant effects on the marketplace. First, it made the marketplace more attractive to large retailers. Second, the fixed-price format is better suited for sales of CDs, books, and videos--all items that have much bigger markets than collectibles but for which an auction pricing model is not useful in generating increased value (Figure 3.3J). As one eBay businessman points out, "posting auctions makes sense for collectibles, computers or precious stones. But packing supplies doesn't fit the auction format" (Neubert 2004).

In fact, the collectibles category, one of eBay's oldest, now accounts for a small percentage of total GMV (Figure 3.4). Sales of collectibles were hovering close to 5 percent of total GMV in 2003 and 2004, below that of Computers, Consumer Electronics, Books/Movies/Music, and falling behind Clothing and Accessories all of which were swamped by the surprising success of eBay Motors. And although growing, the Collectibles category is doing so at a slower rate than most others. EBay estimates that growth in Collectibles will soon fall below 10 percent.

The change in market formats has also heralded different relationships between eBay the company and different categories of users. EBay market rules and innovations have tended to favor growing market sectors. The company, by its own admission, tends to measure everything and make decisions that benefit the market as a whole (Figure 3.5). Thus, the sectors that represented much of the core eBay market at its inception such as collectibles, are not as influential. In fact, many longtime PowerSellers are frustrated with company officials for distorting what they see as fundamental informal market rules: "They [eBay] used to have a real willingness to listen to the community and make changes. Now it seems like they care less about the community and more about just making a profit. They care more about people selling big ticket items" (Interview with eBay seller, June 2005).

## The Shift from Person-to-Person Sales to a Trading Platform for Businesses

The historical notion of eBay being strictly a consumer-to-consumer platform is somewhat anachronistic. You have hundreds of thousands of folks on there now that make their living on eBay. (Scott Kessler, equity analyst with Standard & Poor's in New York).

The face of the typical eBay seller has morphed from the individual collector selling part of his/her collection or clearing unwanted items out of the garage into that of small and medium sized businesses that can leverage economies of scale, invest in advertising, provide insurance, warranties, and other guarantees. The new market actors arrived with the change in sales format and new tools available for sellers. No longer was eBay the online garage sale of its early days bringing individuals together to exchange goods in a market. EBay's shift in focus was an intentional effort to increase the size of the market. EBay celebrated this shift in the market, announcing in its 2002 Annual Report that eBay sellers represented "every link in the distribution chain, from large manufacturers and wholesalers, to small businesses and individual merchants (2002 Annual Report)."

Four major trends distinguish the contemporary eBay marketplace from the original conception of the site as a venue for individual, consumer-to-consumer, exchange. First, there are a growing number of eBay middlemen gathering items from individuals and selling them under their own name under consignment. Second, there is a trend toward online storefronts with eBay encouraging its own version through its eBay Stores program. Third, traditional retailers have occupied a large space in the marketplace. Fourth, groups of sellers and trade associations have formed in order to lobby eBay for various rule changes or other special privileges. Combined, these businesses sell the vast majority of goods in the marketplace. Approximately 90 percent of eBay registered users are solely or primarily buyers (Tedeschi 2004).

One of the hallmarks of the mature eBay market is the emergence of middlemen. EBay's moved to encouraged the presence of these sellers, initially known as Trading Assistants (TAs). EBay launched its TA program in February 2002 in order to increase the number of goods for sale. Trading Assistants operate as online consignment stores; they list and sell items for others on eBay for a commission or fee. Over 34,000 individuals and businesses were registered with eBay in 2004. They usually offer technical experience in researching an item's fair value, photography, marketing/descriptive copy listing, payment, shipping, etc. Essentially they try to leverage their eBay seller status and reputation and ease and convenience of use. EBay has created standards of conduct and behavior for TAs such as maintaining a 97% or better feedback rating.

Drop-off stores are an extension of eBay's trading-assistants program. These stores, the largest of whom have franchised, represent a substantial and growing part of the eBay seller community. The dropoff industry generated close to \$14 million in sales in 2004 (Tedeschi 2004). While this total may seem small in comparison to eBay's overall GMV, the sales are part of a rapidly growing and well-organized collection of sellers. As one drop-off employee told me, "I have worked for a variety of franchise industries, including many fast food chains. This is by the far the easiest sell and fastest growing industry that I have been a part of" (Interview, ISoldIt employee, 2005).

The purported advantages of established eBay businesses appear to be more than just rhetoric. Randy Adams, CEO of AuctionDrop, cites a 90 percent success rate for closing an auction compared with 43 percent for the average auction. ISoldIt's Elise Wetzel also claims to have a 90 percent success rate. Research about the importance of reputation effects, marketing, and the use of eBay features (i.e. additional photos, featured listings, eBay's kew words program) is somewhat ambiguous it does appear to have a positive effect on final sales price (Lucking-Reilly 2000, Bajari and Hortaçsu 2004, Vishwanath 2003, 2004). TAs also have the ability to offer discount shipping,

warranties, easy to use return policies or to be accredited as bonded sellers, etc. The ability to provide this type of guarantees seems to supercede reputation effects (Kashkooli, working paper). The significance of this shift in the market is not just that individuals might find it easier to use TAs, but that the barriers to entry of selling online are high enough, and that these middlemen are able to compete on a different playing field.

Larger sellers including drop-off stores have additional benefits besides their ability to coordinate, streamline marketing materials, and have additional resources to use market tools. Typically, drop-off businesses will also exploit the eBay Shop service, which offers any serious trader his or her own dedicated Web address, and allows buyers to search each seller's own "shop" for listings. The eBay stores program launched in 2004 and, as with the many aspects of the market, has grown rapidly. (Figure 11). At the end of Q1-06, eBay hosted approximately 486,000 stores worldwide, with approximately 247,000 stores hosted on the US site. EBay argues that ellers that use these stores gain substantial advantages (Figure 3.6).

Figure 3.7 is an example from eBay's own marketing tools demonstrating the advantages of operating a storefront; this effort underscores eBay's active recruitment and incentive structure to move larger sellers into this system. Storefront users pay eBay a fee, of course, for the right to operate. EBay staff excitedly unveiled an array of new features to the eBay stores program at their 10<sup>th</sup> anniversary celebration including an escalating package of services with correspondingly escalating fees.

The last category of business courted by eBay is larger manufacturers and retailers such as IBM, Motorola, Disney, Best Buy and many others. These larger businesses use the site as a storefront or to drive traffic to their offline stores. Sales from these stores accounted for about 5 percent of eBay's sales in 2005. Of course, large sellers desire other benefits, such as volume discounts, like the kind offered by Amazon.

Officially, eBay claims that it tries to treat all sellers equally. "We demand that dropoff locations follow the same rules that every other trader follows," says Hani Durzy, eBay spokesman. "That they're open, honest, communicative, and that they ship fast." However, eBay actively trains and supports TAs through its TA Program and eBay employees have been involved in some of the training for various franchisees. From the companies perspective, increasing the number of sellers on the sight will increase the number of buyers, which in turn increases the number of sellers in a virtuous cycle. Many of these sellers are convinced that, as their sales climb, eBay will need to respond more to their needs: "You can't ignore people who have volume," says Ken Sully, CEO of iSold It. "When you start to become a bigger player, of course you're going to get looked at a little differently" (Smith 2005).

# **Competing for Sellers**

Of course, large, well-known businesses and growing franchises are not the only groups pushing eBay for changes in the marketplace that meet their selling needs. Other groups of sellers, particularly the most successful, have formed trade associations to deal with the growth of the market and the difficulty of gaining influence as a business generating a relatively small amount of business. Jim and Crystal Wells-Miller describe the change as follows:

Not even close, at one time even the individual voice could be heard. However, with so many voices coming at the decision-makers, it becomes too difficult for any one seller to affect change. Even as a "community of users" the voice often becomes diluted to the point of ineffectiveness. I believe this can change though, the key to solving this problem within the industry is focus. Rather than a muddle

of voices all weighing in on different issues. I believe that any group can affect change, but only by focusing on a single issue, and seeing it though to its final resolution. (Interview on Auction Bytes, July 25, 2004)

The Professional eBay Sellers Alliance (PESA) is an example of one such group. PESA is a non-profit trade association comprised of 600 high-volume eBay sellers representing a wide variety of goods and services. PESA members generate over 70 million eBay transactions each year totaling over \$1 billion in annual eBay GMV. While it is difficult to identify any specific rule changes directly influenced by PESA, they have certainly gained eBay's ear. At the eBay Live! In 2005, the 10th anniversary celebration of the company, PESA was accorded its own after party and reception at the end of the second day, and they enjoy considerable access to key eBay category managers and top executives. They are also slowly working out and defining key goals.

PESA is a forum for members to exchange innovative and creative ideas and business solutions for the purposes of leveraging strategic or technological influence with online selling platforms; perpetuating the professional education of members; developing benefits for members through pooled purchasing influence; increasing exposure, trading volume, and profitability of members; and representing a collective voice to the market, the industry, media, and policymakers." (PESA mission statement, the emphasis is mine).

The above passage highlights both PESA's expressed intent to lobby eBay and politicians at various levels and its efforts to gain competitive advantages through means not readily available to individuals and smaller sellers.

PESA and other medium and large businesses that operate on eBay are a critical part of eBay's success. Their ability to influence changes in the marketplace are enhanced by an increasing ability to develop online stores outside of eBay, use other online venues such as Amazon or Overstock.com, or purchase advertising hits via search engines such as Yahoo and Google.

Figures 3.8 and 3.9 are from a 2005 eBay report to stock analysts trumpeting its competitive advantage in relation to its competitors. The metrics shown are less interesting for their specific details than they are as a clear demonstration that eBay is keenly aware of and influenced by the fast changing world of e-commerce and internet services in general.

## Battle for the Level Playing Field

At one time even the individual voice could be heard. However, with so many voices coming at the decision-makers, it becomes too difficult for any one seller to affect change. Even as a "community of users" the voice often becomes diluted to the point of ineffectiveness. Jim Wells-Miller, Founder of Online Traders Web Alliance

The above description of the transformation of the character of eBay sellers, expansion of market categories, and dramatic shift in market format were not a natural evolution of the market or uncontested by eBay users. Changes to the structure of the eBay marketplace were in part a result over internal battles among eBay sellers and eBay, Inc. about the definition of the market itself. What were the conceptions of control that would govern competition for eBay users? Critical in eBay's early years was the belief in the company and among its core users that it was doing something fundamentally different—in essence it was changing the relationship between buyers and sellers and lowering the barrier of entry that prevented individuals from competing with corporate and more established sellers. EBay's market identity was not directly oppositional to any particular brand, but rather to a way of doing business in which large sellers and corporations were seen as placing high barriers to entry and using vast resources to swamp attractiveness of small sellers.

EBay's guiding vision and collaboration with its sellers was part of this initial euphoria that they were collectively changing the face of commerce—opening the door to "true" entrepreneurs who would succeed through industriousness and ingenuity and not vast resources and the closing off of competition. Early market participants shared Omidyar's vision that the eBay marketplace would democratize commerce by allowing this collection of sellers to compete with traditional retailers. Foundational to this vision was a commitment to one of eBay's guiding principles—that the marketplace was a level playing field. Defining what a level playing field meant and then maintaining its boundaries was the subject of political contestation.

Ebay's earliest sellers were committed to its mission, shared the companies desire for well designed mechanisms of exchange, communicated constantly with Omidyar and other eBay staff, and helped to police the site to ensure that new entrants followed "eBaysian" culture (Cohen 2002). EBay users were instrumental in organizing the new marketplace and creating conditions for successful exchange for buyers; sellers worked with each other to establish best practices, tutored one another on eBay's discussion boards, shared information about posting listings on the site and other techniques to improve the quality of listings. They viewed this cooperation as necessary in the effort to legitimate this new category of online sellers and the safety and enjoyment of using the marketplace. The central tenets for these sellers and, at the time, eBay management were a commitment to auction pricing, search results presented by time ending soonest, a level playing field for all sellers meaning that no special privileges existed, and that reputations had to be earned in the marketplace through successful exchanges and contributions in online forums.

All eBay sellers are ultimately committed to eBay's success in some fashion since their own success depends on a well functioning marketplace. Yet, within this seller community there can be and are differing ideas about what the community should be like and what the prevailing ideology should mean. These actors are, in a way, a version of Scully and Meyerson's "tempered radicals"-actors who want change but within the bounds of the success of the broader organization.

#### Early Struggles to Control Competition

EBay management made a seemingly innocuous decision n early 2000 that led to the first true seller revolution in the marketplace. EBay placed a banner ad for a toaster that linked to a seller outside the marketplace. EBay's original sellers who viewed themselves as largely responsible for the success of the marketplace felt that management was slowly moving away from them as partners. EBay had not made pre-IPO stock available to its core sellers, there was discussion of fixed price sales after the purchase of Half.com, a fixed price online sales platform, and the sense that eBay was more concerned with share price than its seller community had heightened tensions with the seller community. Their suspicions were confirmed when the first banner ad for a toaster appeared. The sellers were outraged by what they saw as the introduction of a sponsored competitor—eBay was trying to generate revenue by accepting banner ads for items that sellers had listed on the site. That non-eBay sellers could purchase advertising that placed their products more prominently then committed community sellers when prospective buyers entered certain search words was to allow unfair competition. EBay's small sellers viewed the attempt to generate advertising revenue as direct competition to those trying to sell items on its site. It was, in their minds, a violation of the level playing field; it allowed larger sellers with greater resources to draw sales away from person-toperson transactions that were the foundation of eBay. The protest of small sellers, orchestrated by Rosalinda Baldwin of TAG and others forced eBay to relent. Sellers won this battle and eBay withdrew banner ads.

Many small sellers remained upset despite eBay's capitulation. Baldwin and Bobby Beeman, a respected seller of baby boom era toys hatched the idea of a formal protest, the Million Auction

March. The idea behind the Million Auction March was that auction format would only flourish if eBay had a true competitor. The hope of those involved was that they could migrate one million auctions to competitor sites in order to generate true alternatives for sellers. The protest movement met with limited success in terms of auction sales, but it got eBay's attention. EBay often responded in these times by inviting disgruntled sellers to eBay headquarters to discuss issues and come to an acceptable resolution. Beeman visited eBay and came away believing that eBay executives were committed to creating a unique marketplace that valued small seller contributions. Meg Whitman, eBay's CEO commented that "we cannot compete with our customers" (Cohen 2002).

Yet, later that year, eBay made another strategic decision that provoked the ire of its small seller community. EBay and Disney launch Disney Auctions—eBay.Disney.com. The contract allowed Disney to have its own terms of service on an auction site on an island, without a link to Disney items on main site. Again, the seller community took to the discussion boards on OTWA, TAG and eBay to lambast the move; these online forums provided organizing venues where aggrieved sellers could connect and collectively push back on eBay's changes and interpretation of the level playing field. And again, the seller community was successful; Ebay and Disney ultimately backed down. Whitman decided that the Disney deal was a clear sign that targeting specific sellers was not worthwhile: "We've concluded that eBay has to be a level playing field. That is a core part of our DNA, and it has to be part of it going forward (Cohen 2004)."

These early skirmishes over the grounds of fair competition reflected disputes between eBay's management team and its seller community over the scope of fair competition in the marketplace and competitive pressures from outside companies like Amazon. I discuss the competitive terrain in greater detail in the next chapter, but eBay management perception of this competition and resultant interpretation of buyer preferences for fixed priced sales, diversity of market categories, and the trust and safety of exchanges, influenced eBay's approach to its own marketplace. On one level, eBay was acting as a capitalist firm trying to diversify its products in an attempt to reduce uncertainty and risk and maintain its survival. On a second level, it continuously grappled with the moral hazard problem of inducing sellers to behave in a manner that improved trust and safety on the site. These two levels are linked by the potential migration of buyers to and from eBay based on the relative security of transactions vis-a-vis other alternatives. EBay had other levers it could use to target seller behavior without providing special privileges to specific sellers or introducing outside competition through banner advertising. EBay used changes in transaction fees (insertion fees and final value fees), changes in the feedback system, adjusted search results, and payfor-service listing enhancement fees (bold titles, subtitles, gallery photos, featured listings, etc.) in an effort to make sellers more reliable, balance fixed-price and auction listings, and increase and diversify product categories.

Adjusting the fee structure, offering new market formats, and changing the incentive structure for seller behavior altered the market practices of seller groups differently. EBay's small sellers such as those active on TAG and OTWA discussion boards were generally against all such changes in market institutions. They saw the changes as perversions of the core eBay experience and mission. While these groups were successful in resisting earlier eBay changes, the appeal of other changes to the growing segments of medium-sized business and sellers in new market categories with fixed prices created a new phase of marketplace conflict over the conceptions of control. In particular, eBay's machinations of the fixed priced format and allowance for listings enhancements allowed sellers with greater resources to make their listings more attractive to buyers and often highlight them in search results which provided them with a competitive advantage or for sellers in, for example, media categories like books and music to list a large volume of fixed priced items. The confrontation at eBayLive! 2005 that started this chapter was the result of this new period of

differentiation. Many of the fees for additional listing fees were small amounts for changes like having a photo of your item show up in the search results, or having your listing highlighted or placed at the top of all searches for related items in a featured listing. These were precisely the types of changes that were attractive and affordable for medium-sized business without razor thin margins. These sellers also began to push eBay for special deals on bulk listings and other high volume incentives.

In contrast, small sellers saw these changes as an undermining of the equality of all sellers. EBay was intervening in the fair market competition by offering services at cost to select sellers. From their perspective, if the offered enhancements promoted a better buyer experience and higher final values as eBay claimed, then they should be offered to all sellers at no cost. They wanted to return to a simple, flat fee structure similar to eBay's starting structure. As one eBay seller explained after the meeting with eBay management:

I added gallery photos, subtitles, and cross-category listings help items sell, then why do they not allow all sellers to use them for free? Look, if we are truly partners with them [eBay] as they claim, then they should want us all to have the best chance of success. They are putting us [sellers] in competition with one another—so I can pay to have my item a featured listing and show above everyone else's—rather than just letting us compete on our own terms (Interview with author, 2005).

The above sentiment was repeated by many sellers during interviews and on online discussion boards. Seller associations such as PESA and other large sellers did not share this view of the marketplace. They agreed with eBay that the level playing field remained intact because all sellers could pay to use the new features that they deemed beneficial. They also advocated that eBay for special deals on listing fees and feature enhancement packages for high value traders; the increasing opportunity for these sellers to go elsewhere increased their leverage.

Omidyar, who by this time was the Chair of the Board of Directors, recrafted the definition of the level playing field. In a recorded conversation in 2008 with Jim Donahue, current CEO of eBay, Omidyar responded to questions about eBay usurping power from sellers and the violation of the level playing concept with the following:

Segments of the Community will sometimes ask for things that are against their own interest and that is what is really funky about this..you really have to put the designer hat on, the manager hat on and take all that input, treat it respectfully but then just do the right thing. You gotta Just do the right thing from, from the whole eco systems perspective

We really have to evolve the user experience, the value proposition...for the Internet community that exists today...It's always important to go back to the core principles, the founding principles, and understand and interpret them in the current environment...Clearly, I never meant level playing to mean that everyone regardless of the quality of service they provided, regardless of their experience on the site, regardless of their feedback rating, everyone should be treated exactly the same way...That wouldn't make any sense...What I meant was equal opportunity. And if you can use that opportunity..and provide better service to customers if you are seller, then you should be rewarded for that...I didn't want to have artificial barriers placed on newcomers and to have people, by virtue of their stature outside the eBay community be treated better. So, special deals behind the scenes because their a big retailer and we want to get them to come on eBay. That is a disaster."

John Donahoe Talks with Pierre Omidyar; http://www.youtube.com/watch?v=JzZArm4tsjk&NR=1

## The Final Inversion of the Level Playing Field

At this point in the markets development, eBay took several more steps to alter the marketplace almost of which engendered support and opposition from segments of its seller

community. The company tinkered with the fee structure to rebalance listings between eBay stores and standard listings, fixed-price and auction items, listing with minimum start price. They also started a more aggressive approach to enhancing the buyer experience by linking certain rules and features to sellers in 2008 based on their reputation scores including the requirement that some sellers use PayPal, changing the default search result listings from Time Ending Soonest to Best Match in 2008 which prioritized listings based on seller ratings requiring that sellers offer certain payment options, dropping the right of sellers to leave negative feedback for buyers.

EBay made several substantial changes in marketplace structure in 2008, but I will limit the discussion to the two major shifts that, in addition to the growing share of fixed-priced sales, mark a clear departure from the original vision of the eBay marketplace and Omidyar's basic principles. First, the company reinvented the way it dealt the feedback system and seller reputations with the introduction of the Detailed Seller Rating system (DSR). Second, the company did exactly what Omidyar had deemed "a disaster"; eBay established a Diamond Tiered Seller program which allowed for unique deals between eBay and large sellers. These changes were a response to perceived changes in buyer preferences and the advantage of competitors such as Amazon in trust and safety.

As discussed in the prior chapter, the feedback system had been designed to allow eBay users to rate the trustworthiness of their fellow users. EBay begrudgingly stepped in to mediate and protect buyers and sellers from illegal or unethical behavior and in rare cases stripped users of their registration status. Reputations were public, mutual, and essential to the early vision of the market. The DSR subverted several aspects of the system. At the close of a transaction and in addition to the usual feedback score, buyers are prompted to rate the seller on a five point scale across four metrics: the accuracy of the item description; their satisfaction with the seller's communication; the speed of shipping; and whether shipping and handling charges were reasonable. Buyer feedback in the DSR system is private information held by eBay. At the same time, sellers could no longer leave feedback for buyers. EBay uses the DSR system to tier sellers including a top tier that receives a eBay endorsement emblem with listings, and display search results based on DSR performance. In essence, eBay took control of a key part of the rate system out of the hands of users, retained the information privately, and then rewarded or punished sellers based on the results.

EBay also made a move to recruit large sellers who it viewed as increasing the diversity of listings and improving quality of service for buyers. As with the DSR, the details of the Diamond Tiered Seller Program were not made publicly available. Diamond level sellers can negotiate their fee arrangements with the company unlike any other seller in the marketplace. Buy.com was the first seller that eBay recruited followed by other companies in the Internet 500<sup>38</sup>. Buy.com possessed the precise resource advantages that eBay's core group of sellers had always resisted and viewed as anathema to the vision of the marketplace. The company can easily offer free shipping, readily accept returns and provide a toll-free phone number, and was allowed to operate with a unique fee structure.

Dinesh Lathi, eBay's Vice Presdient of Seller Experience defended the decisions by citing the critical role of buyers, the influence of competitors, and how these moves did not, in his view, violate the founding principle of the level playing field:

What's been said outside of eBay is that lower prices and free shipping are "what eBay wants". The reality is that it doesn't matter what eBay wants... eBay\_com is a marketplace and that means neither eBay nor our sellers get to set the price of goods sold on the site, buyers do. This is as true in auctions as it is in fixed price. Lower prices and free shipping are what buyers want.

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<sup>38</sup> The Internet 500 is a rating of the top 500 e-retailers. The list is available at http://www.top500guide.com/.

When we think about Level Playing Field, we tend to focus on equal access to opportunity...In terms of the Diamond Tier of PowerSeller, we are willing to negotiate special pricing with any seller who can meet the very high customer service and volume requirements we demand of these sellers. Making it possible for anyone to access our market and succeed as a seller and offering incentives to the very best sellers are not mutually exclusive goals.

...we have recognized that the scale and capabilities of large merchants absolutely enhances buyer demand for eBay items. However, the needs of very large sellers differ from the more typical eBay seller and that has spurred us to both negotiate bulk pricing (eBay Ink, "Q&A with Dinesh Lathi," http://ebayinkblog.com/2008/11/24/qa-with-dinesh-lathi-ebay-vp-of-seller-experience/).

The community forums erupted in vitriol as long-time sellers deemed this act the ultimate betrayal of the level playing field. An anonymous letter calling for a boycott of Buy.com made the rounds throughout online discussion boards and blogs.

...when it comes to companies like buy.com bulling their way onto the eBay marketplace we believe it's time to take stand. Together.

Approximately 1.3 million people make a living selling on eBay. Most are hard working Americans like you and me who are trying to make ends meet in a very tough economy. Some are stay-at-home moms and individuals with disabilities who count on non-traditional jobs, like selling on eBay, to pay their bills.

So who is bullying our hard working neighbors on eBay? They are what eBay calls "Diamond Sellers" and they get special treatment and fee discounts on eBay that gives them an unfair advantage over the smaller sellers who are the heart of eBay.

...Not exactly the "level playing field" ideology that was a founding principle of eBay. So Diamond Seller growth is coming at the expense of small businesses who conduct hard, honest work every day. Not cool.

The above passage highlights the frustration of many members of the eBay seller community, a clear demarcation of what the writers and supporters consider to be true, honest eBayers, the reference to unfair competition, and the framing of their complaint in reference to the concept of the level playing field.

PESA, representing a different seller demographic than that discussed above, also weighed in on the dispute by posting a public letter on its website.

We agree that the deal eBay arranged for buy.com, as well as the new diamond tier pricing, hurts the eBay community overall because it provides free access to the marketplace without the same commitment to success that the current listing fee structure requires of the rest of eBay sellers...

We agree that eBay needs to focus on the buyer experience. However, we are disappointed that sellers that are delivering great buyer experiences find themselves at a substantial disadvantage because of the pricing disparity of the diamond tier access. We believe that sellers that are doing the right things by all of eBay's measures should not be disadvantaged (PESA, "PESA's Official Response," http://www.gopesa.org/news/index.cfm?page=response-to-not-buying-at-buy-com).

PESA's response echoes the sentiment that the Diamond Tier pricing violates its membership's understanding of fair competition. However, their concern is not in the existence of a tiered system altogether, just that it is not accessible to sellers such as its members.

#### Conclusion

EBay was supposed to be the chance for individuals and small sellers, through their collective efforts, to compete with the large retailers. Rather than David vs. Goliath, they were a community of David's that would topple or at least stand toe to toe with Goliath. This idea was embodied in Omidyar's fouding principle that the market place was a level playing field. It was a site for exchange wherein individual to individual sales based on an auction mechanism encompassed in a community ethos that served both to bind sellers and eBay, Inc. into an entity with a common goal and purpose. I have shown that over time, each of these three cornerstones have eroded. There has been a fundamental change in format in which fixed price sales account for over half of GMV. There has been a change in the core eBay seller from the industrious individual to small and medium sized businesses with a growing infusion of large business that were established elsewhere. The community of sellers has fractured into distinct interest groups with often oppositional views on the appropriate direction of the marketplace.

Why did the conceptions of control change in the eBay marketplace? The case of eBay offers two essential contributions. First, an understanding of the political dynamism of incumbent challenger relations and how those play out in a new context of exchange. Second, the existing literature splits into focusing on internal market organization—incumbents and challengers—to the exclusion of consumers. I integrate how attention to customers on two levels—eBay and its seller community and eBay and marketplace buyers—influenced decision-making. Ideas about market development and equality play out through competitive pressures and perceived organizational goals. In this case, change came from either the explicitly expressed desires of buyers, eBay Inc.'s perception of buyer demand, or competition for buyers and sellers in the emerging field of ecommerce market. All of these changes/forces were mediated through internal market politics of sellers and couched in the rhetoric of community and a level playing field.

As the composition of marketplace sellers changed with changes in market formats including fixed price sales, the conception of control became more difficult to sustain. This shift in the seller community would not, in and of itself, denote a destabilization of the market. EBay's initial seller community saw themselves as part of a redefinition of retail. These sellers were able to help define and maintain a dominant conception of control consisting of auction pricing, a reputation system built within marketplace, and no special incentives for any sellers. These marketplace morals were one way of controlling competition. They were able to organize into seller associations and lobby eBay to reinforce this view of the market in the face of new market entrants. Larger sellers & or new sellers from outside markets had less vested interested in core eBay values and sought mobilize their economic resources and power into political capital--move the market in their direction. These sellers were able to push two other changes that constitute institutional change—a continued move into fixed price sales such that the site became a hybrid of fixed price sales and auctions, an expansion of market categories, and the beginning of market tools that allowed special privileges for certain categories of sellers. The dual layer of firm-customer relations complicates the management problem of firms in new marketplaces in creating stable institutional arrangements. The emergence of eCommerce competitors exacerbated this management challenge.

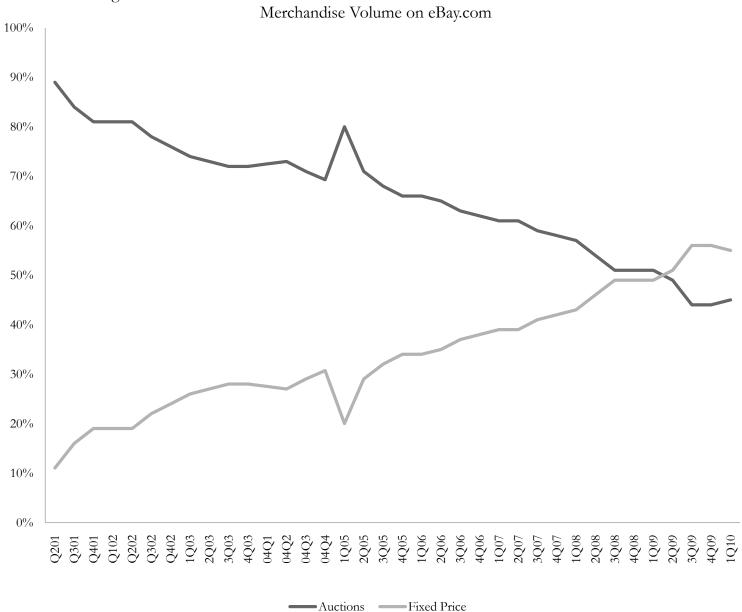


Figure 3.1: Percent Contribution of Auction & Fixed Price Formats to Total Gross

Figure 3.2 Year-to-Year Growth Rate of Auction and Fixed Price Format on eBay.com

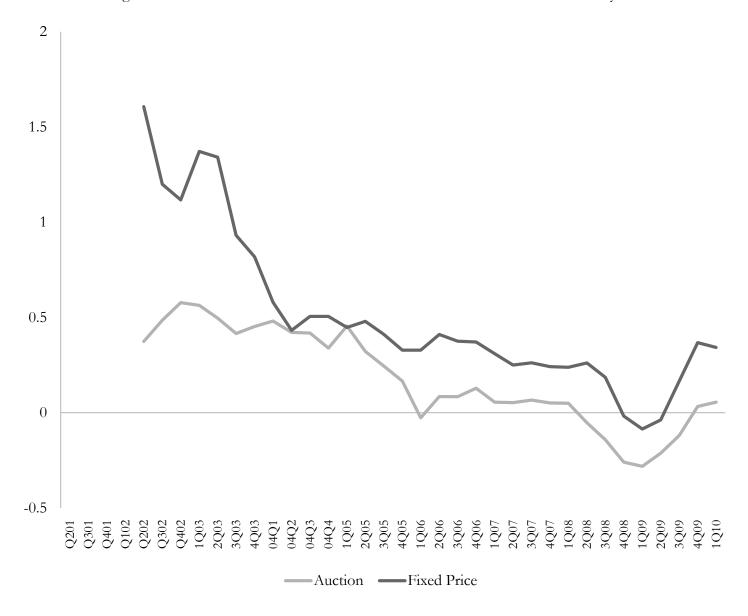
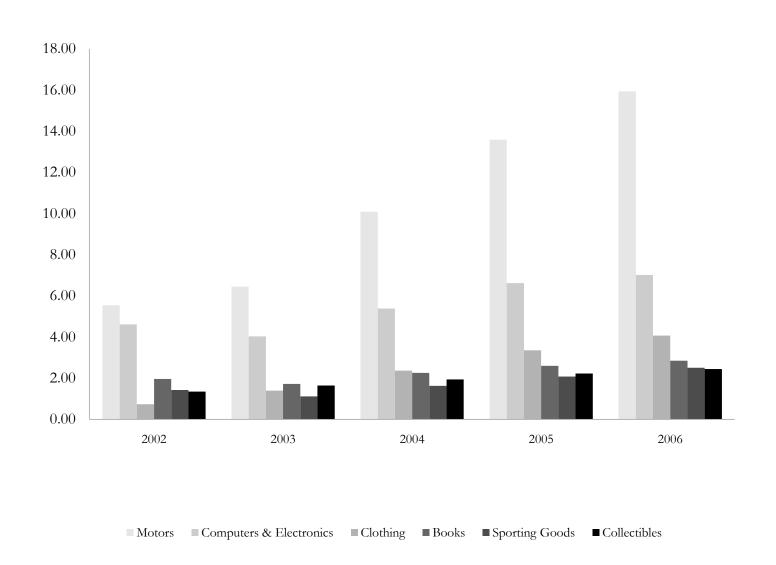


Figure 3.3: Gross Merchandise Volume by Marketplace Category on eBay.com



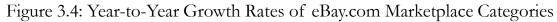
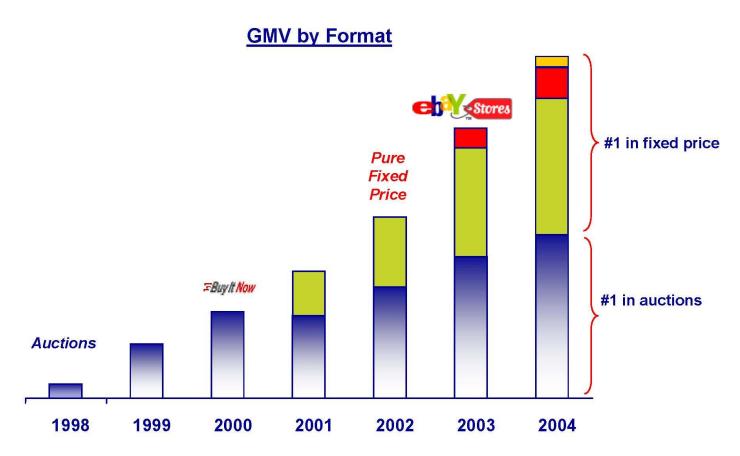




Figure 3.5: eBay's Changing Market Formats and Core Strategy



Source: eBay Investor Relations, Slide for Analysts 2004

Figure 3.6: Growth in eBay Stores (thousands)

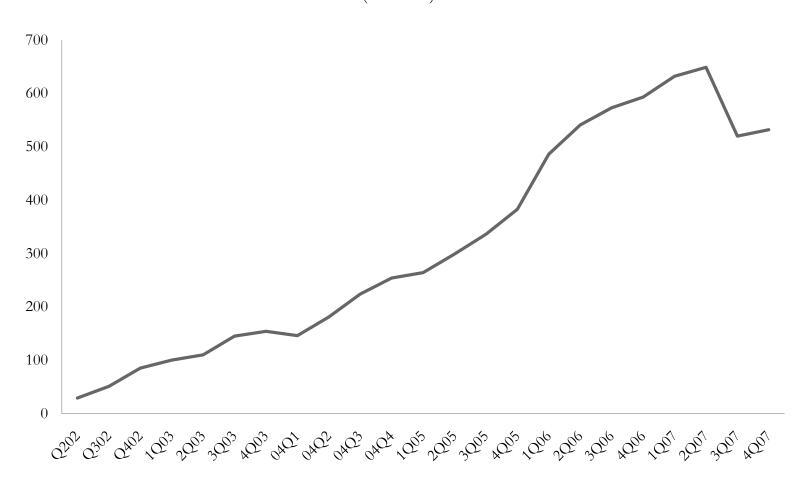
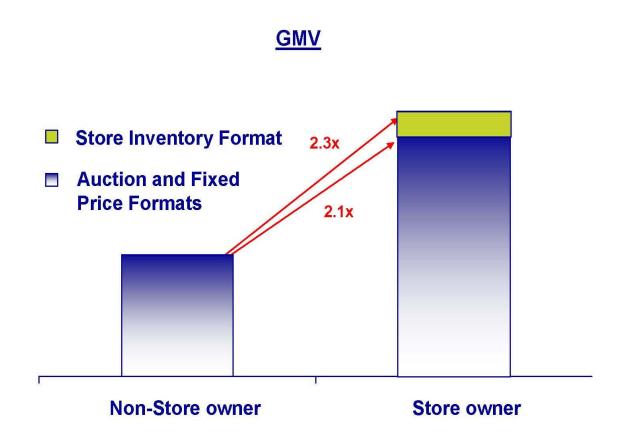


Figure 3.7: eBay's Promotion of Marketplace Stores as Superior Selling Strategy



Source: eBay Investor Relations Presentation, 2004

Figure 3.8: eBay Demonstration of the Value of Selling through its Auction Format over Competitor Marketplaces

# Seller value: Lowest cost per item

## Cost of selling a \$300 iPod



\* Includes payment processing Source: Company websites

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Source: eBay Investor Relations Presentation, 2005

Figure 3.9: eBay Demonstrating the Value of Selling through its Auction & Store Format over Competitor Marketplaces

# Seller value: Customer acquisition

## Cost of selling 100 books per month at \$15



<sup>\*</sup> Assumes \$0.20 CPC, 2.5% click-to-purchase conversion for Paid Search Source: Company websites, eBay analysis

Source: eBay Investor Relations Presentation, 2005

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# Chapter 4:

# Real Businesses in Virtual Markets: The Struggle to Define e-Commerce

In this chapter, I situate eBay's relationships with diverse groups of sellers and strategic decisions about which groups to support through changes in market formats and rules within the emerging field of e-commerce. In the mid-1990s, e-commerce did not exist on a broad scale; existing companies were just beginning to develop online presences. There were no unique online retailers, price aggregators, or even online classified ads. The main early movers were existing bricks and mortar businesses to go online or for specialist/product specific businesses to adopt the World Wide Web as a new sales channel. In 1994, Pizza Hut began experimenting with online orders, and magazine subscription services and mail order business explored moving their sales model to the newly available platform. Companies like Dell computers only began expanding their model of selling computers directly to computers to their online site in 1996. It was into this climate that companies like Amazon, AuctionWatch (eBay's original name), and host of other start-up companies began creating online-only businesses. EBay's competition with its principal competitors is a case of a new market in e-commerce forming and how they collectively come to structure the market. EBay pioneered filling this space with an online garage sale based on auctions from a broad assortment of sellers offering a diverse array of products. None of these companies was sure about the key to a profitable business model, of which types of sellers, products, and exchange systems would thrive. As the field matured, the most successful e-commerce companies, including eBay, had to interpret and react to the strategic decisions of other firms and seek ways to ensure their continued profitability.

In this context, eBay's decision to include large firms in the marketplace and the shift from an auction only format to include set prices shows the dynamics of a capitalist firm diversifying its products to survive. Consequently, eBay has to manage the inherent tensions in such firms of finding and keeping customers (Fligstein 2001). Solving the institutional problems such as payment and honesty are different from the problems of the heterogeneity of producers and consumers. Neither institutional economics nor the economics of information provide much leverage for understanding these dynamics. Medium and large businesses that operate on eBay are a critical part of eBay's success. Their ability to influence changes in the marketplace are enhanced by an increasing ability to develop online stores outside of eBay, use other online venues such as Amazon Marketplace, create their own web presence or purchase advertising hits via search engines such as Google's AdWords. Much of these dynamics have to do with eBay's role as a market competitor in the broader field of e-commerce.

EBay's relation to its competitors demonstrates a second set of incumbent-challenger relationships in the marketplace. On one level, eBay acts as a marketplace manager governing the conceptions of control and rules of exchange that affect small and large sellers in its marketplace. At a second level, eBay watches and accounts for other market actors in its industry. Decisions about market design, format, and rules are an iterative and reflexive process reflecting the dynamics of the above two sets of market relationships. Using over 50 interviews from executives at eBay, its

competitors, and sellers, and publicly available online discussions and interviews with key figures in the industry, I show that these companies compete directly over sellers and through competing contractual arrangements with the seller community. In essence, each company that enters the field has created unique market formats—the contractual arrangements with sellers, which party bears ultimate responsibility to buyers, and the strategic use of the company brand to entice buyers and reward sellers.

This chapter shows how eBay's competitors have arrived at alternative institutional arrangements to the same sets of problems of market uncertainty: (1) the technical aspects of reducing uncertainty between buyer and seller—payment, shipping, liability, reputation, the party responsible for the ultimate enforcement of exchange contracts; and (2) managing the political dynamics of diverse groups of sellers while catering to buyer demands. Amazon Marketplace, Google AdWords, and the emerging online presence of big box stores like Wal-Mart offer different solutions based on their executives' conceptions of online markets. The Amazon Marketplace model is closest to eBay's but with a different set of contractual relationships with sellers and a greater responsibility for the success of the transaction and enforcement of contract. Google pioneered a different approach to this market: They see the world of e-commerce as essentially a problem of driving traffic to individual sellers. Many sellers see eBay in part as a marketing platform. Amazon Marketplace also acts as a powerful way to draw people to individual sellers—essentially trading on Amazon's reputation and market presence. Google avoids creating and managing a marketplace structure entirely and instead makes its money on the auctioning off of advertising itself.

#### New Markets, Competition, and Diversification

Inquiries into the dynamics of markets have identified three stages: emergence, stability, and crisis. There is a great deal of uncertainty at the beginning of any new market—about who the major actors are, in what ways actors structure their interactions, what constitutes the currency, and how to generate stable profit and ensure survival. Companies such as eBay and Amazon operate in an emergent field where firms seek to generate at least part of their revenue through the efforts of third parties. At one level, these arrangements come closest to those described in the literature on the relationships between producers and suppliers in which both parties seek to create stable relationships. For example, Baker et al. (1998) suggest that network structures in relationships between advertising agencies and their clients constitute the rules of exchange; the precise nature of these relationships can change over time in response to competition and external changes in the economy— in this case from fixed-prices to exclusivity, to loyalty. These market institutions are politically contested and establish the boundaries for market operation—what actions are possible and how other actors will interpret those actions. Even within-market decisions about how to deal with trust and uncertainty are addressed in a co-evolutionary process—eBay responding to Amazon and vice versa.

Supplier-customer relations are thought to be about trust indexed through direct network ties that reflect ongoing social relationships between buyers and sellers (Baker et al. 1998; Uzzi 1996, 1997). The incentive for maintaining these ties is that they provide stable market relations that allow actors to project sustained transactions and survival. Yet, these relationships can be more more fluid in modern online markets where sellers can operate in several venues simultaneously. While basic competition for services has always played a role in determining the terms of supplier-customer

relations, the relative ease with which sellers in online markets can enter and exit these markets increases competitive pressures for their business.

Firms can react to actions of their principal competitors and general uncertainty in a variety of ways. Core to this endeavor is selecting a business strategy based on the management's understanding of the competitive environment. These strategies evolve over time in response to pre-existing strategies of the firm itself as well as the strategies of principal competitors (Fligstein 2001). In this approach, firms seek to ensure their survival by controlling competition and buffeting themselves against changes in any one product category. Firms can diversify to shield selves from fluctuations of particular products, establish long-term and/or exclusive relationships with suppliers and customers, and engage in niche production to avoid direct competition with competitors (White 1981). Once firms have chosen a strategy it may result in lock-in or path dependence (Nelson and Winter 1982) either through network effects where the simple early adoption of a product by consumers leads to greater use and acceptance by sellers or through the adoption of a product or set of standards that favors a given product or actor. While studies on path dependence have often focused on the development of a product or set of political institutional arrangements, the basic theoretical tenets should also apply to internal firm decisions about strategy.

There is also an additional and unique layer to markets such as eBay and Amazon with dual layers of customers. They need to not only establish stable relations and institutional arrangements with seller communities, they also need to determine the degree to which they manage or govern the relations between sellers and buyers. As I noted in prior chapters, these challenges present technical and political challenges for market designers and managers. The fundamental dynamics of these relationships are altered by the broader competitive environment which effects the leverage and resources of actors at each level—buyers who have alternative purchasing channels, the seller community which can gain leverage by their ability to operate in different environments, and the managing firm through its ability to attract buyers through marketplace design.

As the dominant market actors adapt and alter the organizational practices of their competitors and the market grows, these firms will adopt generalist identities. Dominant firms come to occupy broad, overlapping areas of the market center. This shift creates opportunities for specialist organizations to enter the market and compete at its periphery. Carrol and Swaminathan (2000) demonstrate this process in growth of microbreweries as a response to the concentration of mass beer producers.

If the above literature is accurate, e-commerce firms should adjust their market practices and structures in response to competition. During the early period of e-commerce, companies would seek to carve out unique domains in that separated them from one another and traditional retailers. As the market develops, the dominant firms in e-commerce would compete more directly and alter their institutional arrangements with their customers in response to actions undertaken by competitors and diversify product selection in order to increase stability. As these dominant firms move to counter one another's strategic actions, mimic core practices, and compete across product categories, sellers, and international markets, it should open up opportunities for niche e-retailers to capture smaller market segments.

In the next section, I analyze eBay's role in the development of early e-commerce markets and their response to competition, most notably from Amazon, and the growth in new competitors as a stable model of e-commerce takes hold. EBay is keenly aware of and influenced by the fast changing world of e-commerce and the institutional arrangements of its competitors. The dynamics of this market are best understood as the interaction of incumbent and challenger firms struggling to define the competitive field—the rules of the game—and manage competition. The strategies

that these companies employ influence the institutional arrangements between the more micro buyer-seller interactions and the relationship between marketplace users and the marketplace managers. I base this discussion on over 50 interviews with online sellers and company executives, company announcements and financial releases, annual reports, annual stockholders meetings and transcripts from conference calls with shareholders (most available at http://investor.ebayinc.com), and Internet equity analyst notes and reports from prominent investment banks including Deutsche Bank, Stifel Nicolas and Morgan Stanley, JPMorgan, Justin Post Bank of America-Merrill Lynch, and others.

#### The Rise of e-commerce

While online markets are ubiquitous today and a taken for granted part of the retail landscape, the scene was much different in the mid-1990s when eBay was still a libertarian vision of the perfect market in Omidyar's head. Tim Berners-Lee had designed the World Wide Web in 1991 and it was not until 1993 that Marc Andreesen created Mosaic, the first web browser. It was in this context, that entrepreneurs and companies emerged intent on using this venue sell things online. Jeff Bezos launched an online bookstore, Amazon.com, in 1995, envisioning that, perhaps, people would be willing to buy books in this new venue. Bezos's ambition included a vision of ultimately rolling out categories for VHS tapes and CDs if the new venue proved as promising as he hoped. The number of adults in the United States who had bought something online grew from slightly over 25 percent in 2000 to over 60 percent by 2009 (the comparable statistics for those who had participated in an online auction rose 8 to 20 percent, a point to which I will return when discussing eBay's strategies). The growth in online purchasing closely resembles the percentage of adults who had got their news online and is substantially greater than the number who had downloaded music, watched a video, or used a social networking site.

Amazon and eBay are arguably the two most successful businesses that emerged from the early attempts to harness the capacity of the Internet for online sales. But in order to succeed, they had to overcome some of the same pragmatic challenges of how to get people to migrate consumption online. Would people buy things from people they did not know or businesses operating in a new and unfamiliar environment? How would you design your marketplace in order to get people to trade? What mechanisms & tools would you use to overcome the uncertainty of exchange? eBay and Amazon offered alternative answers to these questions in the mid-1990s. Bezos' Amazon elected to modernize traditional retailing by optimizing the use of the World Wide Web; an online business allowed them to have a limitless inventory of goods that could be shipped directly to consumers on demand. The company would need warehouses to store its inventory as well as maintain an effective distribution network but could do away with a traditional brick and mortar storefront.

Omidyar and Jeff Skoll wanted to break away from the traditional retailing world entirely. While Omidyar's vision of a utopian market offered theoretical satisfaction to many interested observers, it was another aspect of his market's design that grabbed the imagination of investors and business analysts. Omidyar and Skoll had developed a business plan that would allow the company to profit without having to produce its own goods, carry inventory or distribute products to buyers. While many people were skeptical of Omidyar and Skoll's ability to create a marketplace scaffolding through which people would feel comfortable buying and selling, the appeal of a plan that minimized the risk, uncertainty, and fluctuations in holding inventory was strong. It was this

unique marketplace architecture that allowed Omidyar's early website, AuctionWeb.com, to do something from the start that few dot-com's ever accomplished—it generated a profit. Amazon, in contrast, did not start generating a profit until the fourth quarter of 2001 when they were \$5 million in the black despite more than \$1 billion in revenues.

The once distinct business models were now viewed as chief competitors in the emerging world of e-commerce and the bellwether companies for their respective models. The May 31, 1999 cover of Business Week was emblazoned with photos of Bezos and Meg Whitman (hired as CEO of eBay in 1998) facing off with the title *Amazon vs. EBay: A Defining Moment for e-commerce.* By 1999, Amazon was hosting auctions in addition to it core business and eBay was considering fixed priced sales. Amazon made a little noticed decision at the time, that they too would begin to host outside sellers on their site. Nevertheless, eBay looked like the clear winner when the dust cleared after the dot-com bubble burst in 2000. It had more combined revenue than Amazon and Yahoo! combined.

#### A Change in Fortunes: eBay's Fall from Grace and Amazon's Surge

Amazon and eBay had a healthy respect for the other company's business model and tracked their success but largely competed at the margins of the other's terrain. Amazon's strategy for its seller business largely focused on large traditional and Internet retailers for whom it would host sales and provide the backroom support of call centers, warehousing, and distribution. As described in the prior chapter, a growing number of eBay sellers were small and medium sized businesses and their forays into partnerships with large companies were shut down. Two changes shifts catalyzed greater competition in mid-2005. First, Amazon turned its attention to the emergence of a new class of smaller online retailers that grew up with the development of the world wide web and sparked in no small part by eBay's market platform. Second, the rapid growth of e-commerce had begun to slow causing both companies to refocus on efforts to bring greater numbers of shoppers online through diversifying product categories, increasing the ease and reliability of transactions, and reduce the uncertainty of online transactions. The decisions that eBay and Amazon made at this point are a turning point in the evolution of e-commerce.

By the fourth quarter of 2008 eBay's once spectacular growth was coming to a screeching halt and Amazon's seller business was booming. Figure 4.1 shows the growth rate of eBay's non-motor business in comparison with Amazon's entire business including its seller program, overall ecommerce, and offline retail sales. EBay's year to year growth in non-motors categories was at -12% and Amazon's seller business grew at 36%. Amazon was directly competing with eBay's once dominant and unique position as the marketplace for a myriad of sellers to collectively sell their wares and winning, growing 48% faster. Amazon's active users base was increasing faster as was the growth in their successful transactions. EBay's year to year active users increased 4% in the fourth quarter of 2008 compared with 10% for Amazon. The comparison in growth of year to year unit transactions was 3% and 33%, respectively. Figure 4.1 shows eBay's flagging fortunes compared with Amazon and its struggle to maintain pace with the e-commerce industry as a whole. An important caveat is that Amazon's seller GMV still lags behind eBay's GMV although it is not competing in all market categories or geographies.

Figure 4.1 also shows an inflection point for Amazon's revenues between the third to fourth quarter of 2006. Amazon was growing 2-4% slower than e-commerce year to year earlier in the decade. But then its growth rate jumped quickly from 10% to 20% faster than e-commerce and continued to outperform the industry through 2008. EBay's struggles, in contrast, are apparent in its

auction and fixed price sales businesses. Figure 4.2 shows that while eBay's move to increase fixed priced listings and sales were a promising area of market growth the trend in fixed price sales and auctions trended together showing declining growth for the first time in 2008. A shift to fixed priced sales is clearly not the key to better competition for eBay. The dramatic turn in the fortunes of eBay and Amazon prompts the question of what happened within the respective marketplaces and the e-commerce field more broadly in 2005 and beyond.

#### Alternative Institutional Arrangements: Competing for Sellers and Buyers

What happened in 2005 that altered the competitive terrain of e-commerce? Over what were they competing? I present evidence that eBay and Amazon altered their institutional arrangements in response to the perceived advantages of one another. The shifts for each firm were both a convergence on the central problems to solve in the market and a divergence in the specific mechanisms used to solve those problems. Initially the companies competed at the level of attracting buyers from the offline world and getting them to move online. But ultimately, they started competing for sellers as well; a process that accelerated in earnest in 2005. The companies' approach to the competitive and business environment, eBay as a marketer and marketplace manager and Amazon as a retailer, lead them to divergent solutions over how to compete for buyers and sellers. For eBay, its sellers were the image of the site—the face of any transaction. For Amazon, the company itself was the face of the transaction.

#### eBay as Marketplace Manager

One of eBay's biggest challenges was that they have always been a marketer and marketplace manager. The explicitly avoided being a retailer and focused on acting as the trading nexus through which independent buyers and sellers could meet. Meg Whitman's background was primarily in marketing. Early in the development of e-commerce the competitive field was diffuse with multiple concepts for how to develop transactions facilitated by the Internet. The field was wide open. As the field matured, eBay had to pay attention to a broader field of competitors including e-retailers.

Prior to 2006, eBay had addressed the uncertainty of buyer-seller exchanges well through PayPal and fraud protection programs (as described in chapter 2) and managed and diversified the product categories, the fixed-price/auction listing balance through adjusting its fee structure (auctions with high insertion fees and low final value fees and the opposite for fixed price items) and managing internal political disputes in its seller community. Prices on the site were competitive with other retailers. EBay store listings were increasing through a low insertion fee and generating additional revenues.

Ebay's fixed priced listings generated under 40% of GMV by the end of 2005 and the company was interested in growing this business and increasing the value to its store sellers. In February 2006, eBay introduced its Store Inventory Format (eBay store listings) in the core search engine. Buyers were see store items in the same list as any auction listing. Sellers immediately responded to the consequent fee incentives, \$2 for an auction listing offered the same visibility as a \$.05 or less for a store listing, and shifted listings from the auction format to store listings. The experiment lasted only two months but it started a shift in the balance of the site as primarily auction pricing to a hybrid auction/fixed price listings. It also privileged business sellers with high inventory who had been pushing eBay for a variety of concessions.

Fees are eBay's other primary means of adjusting the diversity of products and listings on its site. EBay raised its fees in substantial increments beginning in 2006. The fee increases had two impacts. The increase and constant altering of fees angered sellers and provided them with reasons to explore other selling channels and it incentivized them to raise prices to compensate for their increased cost structure. The result is that the increase fee structure impinged on eBay's potential as a site that offers greater value—one of its original hallmarks. Sellers increasing channel options offer them direct comparisons between cost structures and easier points of exit from any one site than was previously available.

#### Amazon the Retailer

In a vacuum, eBay's increasing move towards fixed price sales and emphasis on business sellers, while unsettling the internal dynamics of different seller groups, may not have hampered its success. That Amazon had decided at that point in time to recruit those same sellers was a more fundamental problem. Amazon's role as a retail business oriented the company to the buyer experience and to the cost of sourcing its products. In 2005-06, Amazon launched and implemented two major programs, one targeting buyer satisfaction and one a page out of eBay's play book. Amazon Prime allowed buyers to open an account with Amazon for a fee of \$79 that allowed for free shipping on all purchases made through the site whether from Amazon directly or through its seller business. Amazon also altered its seller business which had primarily focused on large Internet retailer relationships. The decision to allow smaller sellers to compete directly with Amazon's retail business and piggy back on Amazon Prime and other buyer-oriented programs was counter-intuitive.

Amazon Prime represented a continuation of the company's effort to streamline the shopping experience for buyers and offer a one-stop, secure experience for a variety of products. Amazon already guaranteed all purchases on its site up to \$2,500 through its a-to-z guarantee program, offered a sole and simple payment system, offered single checkout cart for all items, timely shipping, and telephone customer service regardless of whether Amazon was the seller. Amazon does not attempt to mediate disputes between Amazon Marketplace sellers and buyers. For the buyer, the appearance is essentially like buying all items directly from Amazon. Amazon's system provides a contrast to having to handle most of these issues on a one-off basis with the seller directly on eBay and through PayPal. EBay evolved from dispute resolution between buyer and seller to ultimately taking a more direct role in guaranteeing purchases (as discussed in chapter 2). These changes seemed to make a difference. Yet, each transaction had to be completed individually with unique sellers. PayPal also still requires buyers to go to a different site.

Amazon also saw a unique opportunity to enhance its product listings and product categories through the active recruitment of top sellers on eBay. As one long-time eBay seller recounted in 2005: "Amazon sent me a letter asking that I move some listings to their site and giving me pads of paper, pens, and all kinds of little stuff. A representative then called me on the phone to ask me if I would consider trying them [Amazon] out" (Interview with author, June 25, 2005). These early attempts at recruiting third party sellers were not always successful but they marked a shift in Amazon's approach. They had to tinker with other site features, in particular how they displayed search results for third party sellers, in order for the new model to take off which I discuss in more detail below.

As a retailer, Amazon is attentive to its unique product listings, in part because they use them to determine whether or not Amazon itself will sell any given product or in any given product

category. This more direct potential competition with its seller community means that Amazon is in tune with buyer dynamics. The company thinks and acts like a retailer and saw the expansion of its seller business a way to fill out product categories and items in which it did not have expertise or for which it was not profitable. Amazon has teams of people organized by category whose job it is to know their product areas intimately and then to buy products and work with vendors according to enhance their offerings. Amazon also employs category managers that collaborate with the retail buyers to understand their strategy and where gaps exist. Amazon then recruits sellers with excellent customer service reputations to fill these strategic selection gaps. The aim of this strategy is to make Amazon a comprehensive place for consumers to shop; or, in the parlance of the Internet business, to make the site more 'sticky'.

Amazon's seemingly counterintuitive decision to recruit sellers with which it might compete allows them a hybrid position between a retail environment and a marketplace like eBay. Amazon can expand its ability to compete across many categories by relying on its third party sellers in price competitive areas and increase their own retail business in high profit areas. The two selling channels better stabilize the overall stability of profits by compensating for down turns in one are (Figure 4.3).

Whereas Amazon takes direct control of this system through Amazon Prime, eBay elected to try to induce seller behavior indirectly. EBay responded to the challenge presented to Amazon by trying to match their handling of the uncertainty of exchange by trying to induce sellers to provide better services and by privileging those sellers listings in the search format. EBay attempted to address some of these issues indirectly through the Detailed Seller Ratings System (DSR). As discussed in chapter 3, the DSR system offered private data held exclusively by eBay provided by buyers about each sellers customer service. Buyers rated sellers on a five point scale on the accuracy of the item description; their satisfaction with the seller's communication; the speed of shipping; and whether shipping and handling charges were reasonable. EBay intended the DSR system to increase the reliability of transactions on the site for buyers and to encourage top sellers that they would get preferred listing status in search results.

While eBay's decision to reward highly-rated sellers and to direct prospective buyers to these sellers makes sense, the DSR system and a related emphasis of free shipping had the unintended consequences of raising prices on the site and alienating many sellers. Many sellers responded to eBay's pressure by including free shipping to avoid becoming invisible on the site. Sellers would then incorporate shipping and handling fees into the list price in order to maintain their profit margins. As a result, they have to pay eBay final value fees on that cost of shipping. Thus, sellers must raise the cost of the item more than the amount of shipping and handling costs in order to maintain the same margins. While this small increase may seem like a small amount of money in real terms, it can account for substantial fraction of a seller's profits particularly when selling at volume. Sellers chafed at the rise in customer support costs which drove many of them out of business or to other selling channels.

I am a media seller who, at one time, had 1 million listings on eBay at a time. Today - about 3,000. I refuse to go to free shipping, because it works like this: eBay wins (they get more in fees), customer loses (higher price), I remain neutral (I have to cover the higher FVF fee by raising price to make the same margin). Sure, there are media sellers who have swallowed the blue pill and gone Free shipping, but I see a dramatic fleeing of media sellers right now.

I think eBays solution to all this is simple: roll back the site about 3 years. Posted by: Kevin Harmon | February 18, 2009 at 09:52 PM

The above sentiment questioning eBay's handling of competition was echoed in interviews and online discussion forums. For sellers, the choice became clear. If eBay was trying to look more like Amazon but doing so through the implementation of a complex, private, and controlling manner, and leaving them at the mercy of buyer whims, then they could just sell on Amazon with its more streamlined arrangements. The comments below by sellers from online discussion boards illustrate the point:

The thing I find curious about Ebay is the way in which destructive policies are generated by the pursuit of beneficial policies in a kind of zero-sum game. For example: Ebay is trying to make the site 'safer' for buyers. Well heck yes, who could argue with that? But it goes about achieving this goal by making things very much riskier for sellers. EBay makes its fees cheaper for high-volume low-ticket sellers by making things very much more expensive for low-volume high-ticket sellers.

What makes Amazon such a great place to buy, is that Amazon makes it safer for buyers by making it riskier for Amazon and taking a stronger stand when buyers or sellers misbehave.

Posted by: Auld Codger | February 10, 2009 at 11:15 AM

eBay does not get it. Sellers have been speaking with a clear voice to which eBay has only recently begun to listen to ... and even then eBay only picks and chooses the relevant parts that they want to hear. EBay does this much in the same way they "emulate" their competitors -- they try to copy Amazon's search and feedback mechanisms but they implement some bastardized version that doesn't work.

Posted by: TheBrewsNews | November 17, 2009 at 05:41 AM

EBay believed that it was achieving its goals despite seller protests. Figure 4.4 demonstrates how eBay measured the success of its new strategy citing an up-tick in new listings, the percentage of listings offering free shipping, and an increase in the percentage of GMV coming from sellers highly rated in the DSR system which the company interprets as an increase in trust. Each of these metrics have problems. I illustrated the problem with using the percentage of listings that offer free shipping as an increase in the value proposition. The rise in total listings does not necessarily correspond to an increase in selection. EBay has been flooded with listings since the 2008 price changes. However, the listings metric does not correspond to the diversity of products on eBay because each listing of an item such as an iPhone, Sony Playstation, etc. is counted as a unique item. The increase in listings with free shipping may come at a cost as described above with sellers earning less per sale and buyers paying slightly more than they might elsewhere for the same item. And, as the above seller comments illustrate, the DSR system may actually be hurting sellers that had otherwise generated many transactions on eBay. The issue with eBay's metric for 'Trust' is twofold: it may hurt the diversity of listings by reducing the number of eligible sellers and it caused many sellers to feel unjustly disadvantaged.

PESA responded to eBay's policy changes in a public letter on its website titled "Deteriorating eBay Market Conditions Erode Seller Confidence":

Merchants are pursuing alternate channels for their businesses which are more economical, including launching their own website, participating in other third party channels such as Amazon and Overstock, and even opening brick and mortar stores. Based recent feedback from PeSA members, merchants are focusing on other channels at higher rates than we have ever measured in the past. Prime products that used to find their way to eBay, are now being diverted to these new "premier" channels that are reportedly delivering higher margins with greater certainty and decreased overhead.

Unfortunately, most of the changes at eBay have been focused on sellers, not buyers. We are proponents for measuring the performance of sellers and rewarding those sellers that provide positive

customer experiences. The concept is used in other marketplaces; however, the eBay execution of that concept resulted in a Detailed Seller Rating (DSR) system that is substantially flawed both in its measurement and transparency. We understand that a new system will not be perfect and should be adjusted as experience builds. The real problem is that eBay seems to be building on top of a flawed DSR system that has not been adjusted to reflect true buyer experience." ("http://gopesa.org/news/index.cfm?page=eroding-ebay-seller-confidence", accessed February 4, 2009).

The above statement expressing the views of one of the largest online associations of sellers connected to the eBay marketplace reveals a growing frustration with eBay policies and the increasing ability of sellers to access other marketplaces and selling channels. Even some of eBay's top sellers in certain categories found their businesses damaged by the new changes.

We are far and away the largest bathrobe seller on eBay. We're probably five times bigger than our closest competitor. We bring a huge variety of bathrobes to eBay, a definite plus for the site itself. BUT, we are not trusted sellers because our shipping rating is 4.8 instead of 4.9...

I think eBay is shooting itself in the foot with this one. By giving trusted sellers such a huge advantage, they are effectively disadvantaging some of their biggest sellers who are not 'trusted'. That's not too bright if you ask me.

Posted by: Alexander Del Rossa | October 10, 2009 at 09:46 PM

EBay's policies for sellers were increasingly countered by a different Amazon incentive structure. Amazon handled its search feature in a different manner. At first Amazon placed its own retail listings above and separate from seller products which could be accessed through a link indicating that the item was available at other price points new and used. The seller listings were then ordered from least to most expensive emphasizing price as the main point of competition. In 2007, they undertook the bold step of competing more directly with their seller community but in a way that provided sellers clear advantages. Amazon began by listing the top three seller listings next to their listings with a link indicating "more buying choices". Then, Amazon allowed the "more buying choices" button to remain when Amazon's retail stock was out for an item allowing the seller with the lowest price to get top billing. Amazon then took a final step that allowed direct competition between Amazon retail items and sellers by allowing the lowest priced item from highly rated sellers to own the buy box regardless if Amazon retail also sold the item. This provided a benefit to sellers to keep costs low because their listing would be the first option for any buyer searching for the item and buyers would know that that was the lowest cost available on the site.

This mechanism for dealing with competition provides an entirely different model than eBay's where items may appear in search listings in a mix of auction and fixed priced items and according to seller metrics on the DSR. When all Amazon's listings are backed by its guarantee it becomes a more reliable transaction for buyer and seller. Unlike eBay, buyers on Amazon must pay for an item at the time of purchase and the listings are always constant. As a seller, you know that Amazon does not even favor their own listing—price is the driving force.

There are also advantages for Amazon's retail business. If they can not offer a product at a competitive price on the Internet, they can withhold inventory until all lower priced units are sold out and then re-enter when their target price would own the buy box. And, of course, Amazon earns money through seller fees on all transactions on the site without having to manage the inventory or distribute it to buyers—the exact revenue model that made eBay so lucrative at the beginning. Amazon's success and the convergence of its model and eBay's approach did not escape the notice of other large retailers, nor smaller niche players. The more generalist approach to e-

commerce arrived at by the two companies provided a new model of business and reopened to the competitive spaces that they had occupied to new entrants.

#### Competition at the Center Opens Door for Niche Competitors

I sold over 300,000 items on eBay for over 12 million dollars, and they kept making anti-seller rules, and raising the rates exponentially.

I complained to them, and they said "Love us or leave us", so I did! Since leaving their site 18 months ago, I have had record sales of over \$3.1 million in 2008, and will likely beat that in 2009, even in the midst of the Great Recession.

Bruce Hershenson; President eMoviePoster.com

I have been selling antique furniture on ebay for over 9 years. I must say, with great success, up until the serious, (detrimental in my opinion)changes that ebay started about 2 years ago. My sales have gone from 95% on ebay and 5% off my website to 90% from my website and 10% on ebay...Ebay lost sight of who their customers are...It is no longer appealing to try and sell to anonymous bidders who may or may not finalize the transaction and be exposed to the abuse from insincere bidders that ebay has created a platform for... I am a top rated seller with almost 5000 positive feedback comments. Only 1 negative as of now in all my years...It is really their choice of whether they want to keep or lose their true customer base. The sellers. As of now, it seems clear they are willing to let quality sellers that provide the niche products leave to other venues...Ebay is only a tool to be utilized for online sales, it is a tool that has certainly lost it's sharp edge and is becoming less and less useful at a rapid pace.

Posted by: Dan McKena | December 11, 2009 at 09:31 PM

With eBay and Amazon converged on a model of e-commerce focused on a third party seller business, competition over these sellers, a diverse product selection, and enhanced customer service, market opportunities rose for new market entrants. As the PESA letter above foreshadowed, sellers increasingly operated in multiple retail channels including creating their own online presence. Large retail companies like Wal-Mart also took notice of the market opportunities available through these models as they south to develop online business units. In this section I briefly examine three areas of new competition: the use of proprietary online sites and the role of search engines, niche competitors targeting specific product categories or sellers, and large retail businesses looking to mimic the Amazon's hybrid retail-third party business.

As e-commerce matured and buyers became more comfortable purchasing items online, independent small sellers increasing turned to developing their own web presence. The challenge for these sellers was how to master the online equivalent of the saying, 'location, location, location'. Online services from payment systems (including PayPal), web hosting services, image editors, etc. are easy to access without special expertise. Attracting buyers to these sites, however, presented a host of problems. Many sellers began to see sites like eBay and Amazon as essentially one form of advertising to drive people to their own websites. Sellers also had another tool that also grew along with the development of the Internet – Internet search engines and pay per click services.

Internet Search Engines

Internet search engines are in a different market. However, they capitalized on their expertise in helping users navigate the World Wide Web by selling advertisements. Google capitalized on this

approach to this market by becoming the dominant search engine. Google understood the world of e-commerce as essentially a problem of driving traffic to individual sellers. Google developed a program known as AdWords that allows anyone to bid to place their advertising campaign on Google's search page when activated by user-identified key words. Costs are tied to when users click-through and advertising link to a sellers site. EBay, Amazon and other competitors also make use of AdWords and other search engines to drive traffic to their marketplaces. Microsoft and Yahoo collectively launch the search engine Bing and innovated programs its own advertising channel, Bing Cashback. Bing Cashback offers discounts to buyers who purchase using the service; it changed the pay per click model by only charging sellers when a user click-through results in a purchase.

The point here is not to explore the competitive dynamics of search engines which merits its own attention. Rather, advertising through search engines emerged as a viable alternative to a growing class of independent sellers looking to capitalize on an online business model. Many of these sellers see eBay, Amazon, Google AdWords, and Bing as alternative marketing platforms. Sellers can operate in multiple arenas simultaneously and adjust their listings according to the effectiveness of each. EBay and Amazon act as a powerful way to draw people to individual sellers—essentially trading on each company's reputation and market presence. The innovation in search engines is that these companies remove themselves entirely from the actual transaction bearing no responsibility for its ultimate success or the satisfaction of either side of an exchange.

#### Convergence on Third-Party Seller Marketplaces

EBay's model of relying on third party sellers to generate profit and Amazon's success in creating a hybrid-proprietary and third party seller retail business model has drawn the attention of other retailers. Big-box retailers are expanding their online presence and the diversity of products. In August 2009, Wal-Mart Stores Inc., the nation's biggest retailer (but lagging Amazon in e-commerce sales) initiated WalMart Marketplace with select large e-retailers to sell products on its website. Other smaller companies have launched third-party programs including Sears. The expanded realm of third-party marketplaces offers sellers a growing field of competitors and variations in institutional arrangements.

#### Niche Competitors

The diversification of eBay and Amazon's marketplaces that both used as a means of generating stability and increased revenues meant that each moved away from its unique expertise—eBay as an online auction for small independent sellers and Amazon as a media marketplace. Niche competitors have emerged that specialized in smaller market categories and aim to do so at a level of service, expertise, and selection that the larger venues have a hard time developing. For example, Zappos has seized a large portion of the online market for shoe sales with unparalleled customer services and guarantees (the solution to buyer seller uncertainty) and wide selection within their niche. Other companies have emerged in computers (Newegg, and TigerDirect), social or personalization sites (CustomInk, Zazzle, BustedTees), sporting goods and other companies leveraging a common infrastructure across several brands (backcountry.com and the GSI selection of sporting goods sites--fogdog, sportsauthority, dicks sportings goods), using a similar approach. There also competitors that adopted many of the features of eBay's model of catering to a small seller community often focused on local goods such as Bonanzle.com, an online auction site, and Etsy.com a site for independent crafts sellers to market their wares. Again all of these new online

entities have sought to exploit to openings created by Amazon and eBay's convergence and pose competitive challenges to eBay's original vision. Bill Harding, the founder of Bonanzle explains the challenges for eBay and the opportunity for businesses succinctly:

In my mind, eBay's problem is half Amazon and half Google. As you point out, Amazon has the upper hand when it comes to commodities. For everything else, niche marketplaces like Etsy and Bonanzle and 1000markets are methodically carving away at the eBay by better serving sellers of a particular need, and leveraging Google to bring the buyers.

#### Conclusion

In 2005, the field of e-commerce hit a turning point where the two dominant firms, eBay and Amazon, moved into more direct competition in categories, arrangements with third party sellers, and the buyer experience. I argue that the coalescence around a model for e-commerce was a tipping point in the development of the field. It defined the areas for competition, caused the largest firms to diversify in order to increase stability, and opened the door to new entrants adopting the new model and niche players that strove to carve out specific product categories or sellers. Amazon's success of combining its own retail business with a third party seller business, in particular, drew the interest of large offline retailers that were looking to expand their online presence. This shift by other retailers occurred in many cases after initial forays into the eBay or Amazon marketplace as happened with BestBuy, Inc. The strategic choices available to the companies were constrained by their prior strategic commitments and conceptions of their role in the marketplace. Amazon had always operated as a retailer and thus incorporated independent sellers into its marketplace in a manner not dramatically different than its relationship with existing suppliers for Amazon products. EBay, which had never held or produced goods (nor wanted to), focused on adjusting marketplace features and rules as an indirect means of coordinating seller behavior.

EBay's original goal was simply to facilitate sales, to create a global bazaar where buyers and sellers would 'meet' to exchange goods and eBay would profit by charging a small fees for the 'rent' of the marketplace. Yet over time their goal became to hold onto customers—buyers and sellers--as competitors emerged. In chapter 3 I demonstrated the internal politics of their influence on the conceptions of control within the marketplace. Here, I have shown how the dynamics of the ecommerce field more broadly influences market structure as well as the vertical and horizontal relationships within the eBay marketplace. All of these competitor sites offer different and emerging models of large online trading platforms for small and medium size businesses. They compete over sellers and buyers through alternative institutional solutions for buyer-seller uncertainty, the rules of exchange, and the contracts between third party sellers and marketplace hosts. These relationships are influenced as much, if not more, by demands of publicly traded companies to meet shareholder expectations for market growth. EBay determined that it must compete for larger sellers but has found it difficulty to compete with Amazon and Walmart on purchasing guarantees because it is not a retailer that controls product. Simultaneously, the competition between these dominant firms has opened the competitive terrain to new entrants. The institutional arrangements that govern e-commerce did not arise in isolation or as a set of efficient arrangements as economic theory might predict. They are a consequence of incumbent-challenger relationships where competitors watch and respond to each other and to perceived buyer preferences.

Figure 4.1: Comparison of Growth Rate of Amazon, Amazon Seller Business, eBay.com

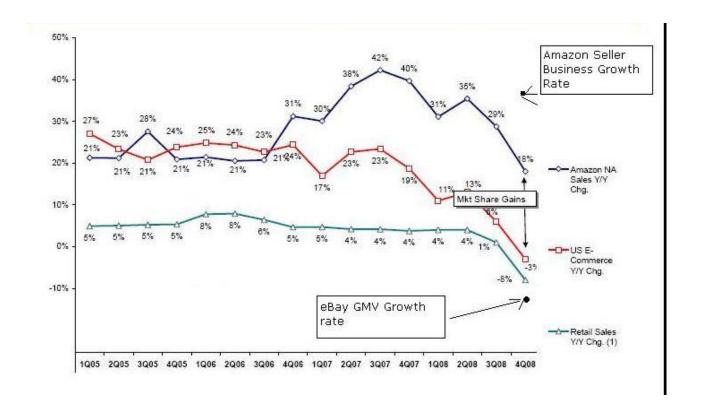


Figure 4.2: Year-to-Year Growth Rate of Auction and Fixed Price Format on eBay.com



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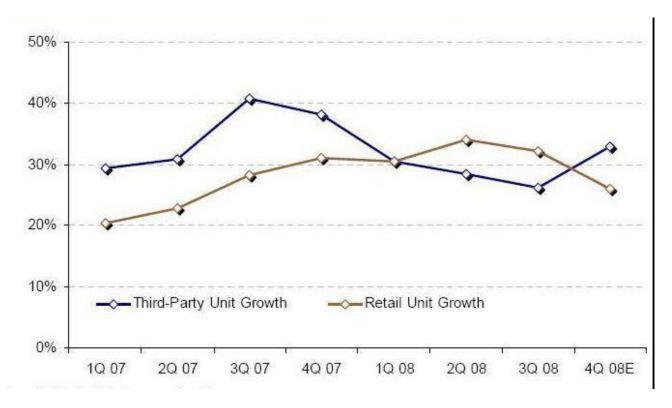


Figure 4.4: eBay Presentation Slide to Analysts Explaining Improvements in Trust, Selection, and Value

# We Took Bold Actions to Improve the eBay Shopping Experience...



- A cleaner site... with ~95% gallery
- Improved service levels... faster growth for better sellers
- · Our success is more closely aligned with our sellers... lower insertion fee
- · Competitive shipping... avg U.S. shipping paid/item down 25% y/y in Q4
- PayPal is a safer way to pay... penetration up 9 pts from '07

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### Chapter 5

# **Building Modern Markets**

There are two or three societal trends that are driving us in an increasingly deep center-right posture. One of them is the power of the computer chip. Do you know how many people's principal source of income is eBay? Seven hundred thousand. So the power of the computer has made it possible for people to gain greater control over their lives. It's given people a greater chance to run their own business, become a sole proprietor or an entrepreneur. As a result, it has made us more market-oriented, and that equals making you more center-right in your politics.

--Karl Rove as quoted in the New Yorker, June 4, 2007

EBay's success has frequently been characterized as the real world manifestation of a perfect market. Its unique character, devoted community of buyers and sellers, and breaking down of many barriers to entry into market exchange brought it to the attention of market analysts, journalists, and academics. And, to be sure, the market still retains much of its original charm. For example, one long suffering sports fan, Chad Carroll, auctioned off his 25-year loyalty to the Kansas City Royals Major League Baseball franchise on eBay. The minor league Kansas City T-Bones and Yahoo were outbid by a group of his friends at the last second for the rights to Carroll's sports allegiance. For the modest sum of \$278.47, the winning bidders purchased one of those priceless items for which eBay stills provides a unique venue: the right to determine Carroll's new favorite team.

I argue that Carroll's undoubtedly cathartic use of the eBay marketplace is an increasingly rare occurrence in the eBay marketplace and no longer represents its core market. EBay's decision to promote small and medium size businesses, the accommodation of large retailers, and the addition of fixed-price sales shows the dynamics of a capitalist firm diversifying its products to survive. Solving the institutional and technical problems of trust and payment are different from problems of heterogeneity of producers and consumers. In the preceding chapters, I took up three relationships that eBay had to manage in order to exist as a company and sustain the eBay.com marketplace: customers, sellers, and competitors. The first challenge was figuring out how to get individual buyers and sellers to feel comfortable doing business in the then new online context. I outlined how the mechanisms for reducing uncertainty evolved over time and eventually catalyzed explosive growth when the problems of trust between buyer and seller were resolved. EBay also had to address its relationships to the seller community and shows how over time power shifted from the small sellers and their organizations to larger sellers and their organizations in a social movement process to establish what marketplace looks like. I then argue that the third aspect of market development concerns what eBay's strategy in relation to its principal competitors in the ecommerce space. I show that the stability of market depended ultimately on eBay finding more and larger sellers, more and diversified sellers, and keeping them invested in the marketplace in order to keep growing and stemming the incursion of Amazon. The story of eBay shows how far the marketplace has come from Omidyar's perfect neoclassical market. The dynamics of these three types of relationships discussed suggest that the idea of a perfect market does not represent everyone's interests. Ultimately, eBay operated like many corporations that sought to ensure its

existence by solving problems and tensions between the actors in the marketplace. Perfect remarks remain more the domain of academic dreams than market realities.

There was a great deal of euphoria and speculation in the 1990s about the new world that the Internet and new communication technologies allowed. The speed and relative ease with which individuals and firms could communicate, share information, and set up new infrastructure opened the possibility of subverting old institutions and the grip of large firms in the economy. The new technologies and the economic and social opportunities they spawned were expected to reduce friction, democratize information and destabilize hierarchical structures. The technology created an opportunity for a classic Schumpterian creative destruction. Central control and coordination by firms and governments was banished to the dustbin of history by the wisdom of crowds and the power of many. As scholars look back over the past 20 years, it becomes less clear how much of this transformation change took place.

The story of eBay I present here provides a counterintuitive response to these claims. The evolution of these markets and e-commerce more broadly is about the struggle to effectively constrain and structure the social. Perhaps the new structures are not as hierarchical as in the past, but they are also certainly not as freewheeling as these popular descriptions. One source for the attempt to define and stabilize these markets is the widespread uncertainty that exists in new markets and new social environments. Individuals and firms respond to uncertainty not by embracing the chaos, but by trying to impose social order and establish accepted standards of practice and behavior. This is as true in the contemporary economic climate as it has been at other times.

For e-commerce, this meant that firms tried to re-establish many of the institutions that made exchange possible in offline markets. In its place, a host of firms, eBay, Amazon, Wal-Mart, and Google are trying to figure out how to profit from the ability of the Internet and mass distribution systems to connect people across space. These interactions need social structure and eBay and its competitors sought to develop that through a process of trial and error. They wound up having to solve the longstanding problem of how to manage a supply chain but in a unique context. The problems confronted by market makers in dealing with buyer-seller relationships, sellers, and principal competitors are not unlike those faced by any other market in other times. That is not to say that the structuring of market relations in e-commerce are identical to those that preceded its development. Individual sellers are able to list their goods in the same venue as large producers and have more power through their ability to find alternative marketplace venues. Yet, the barriers are growing and the eBay market has moved away from prioritizing the smaller sellers. This drive towards more traditional forms of organization is perhaps one explanation for eBay's recent struggles and Amazon's rise: Amazon's surge is reflective of the benefits of its more hierarchical and formal organization.

Up to this point, I have presented the case that these new markets share many similarities to older forms of market organization and, consequently, many of the approaches used to understand market dynamics more generally apply here. Now I want to suggest that there are, in fact, aspects of the world of e-commerce that cause us to think about existing theories more critically. The perfect market story is only partial, not just in the foundational sense, but also because it obfuscates the management of social relations and social experimentation that actually occur in real markets. This is not a shortsightedness unique to neoclassical theory. Social theories about the organization of markets present a relatively static view of these processes. There is an assumption of equilibrium or stability or firms seeking to create such a state. The explosion of the new market in e-commerce, one that eBay and its competitors tried (and are trying still) to figure out, is a picture of fluidity and constant negotiation. There are moments of stability where market actors coalesce around a central

understanding of the market but these tacit agreements are constantly challenged whether by shifts in competitor behavior internal or external to a given marketplace. The dominant approaches in the sociology of markets, networks, institutions, and performativity as well as information and transaction cost economics are not well-suited to analyzing how market processes work under conditions of extreme uncertainty and extreme growth.

The performativity approach ascribes too much agency to economic actors and their models. Much like rational choice economics. The idea that these market actors have clearly defined models based in economic theory that they seek to impose on their marketplaces is perhaps a product the empirical subjects for much of this research – financial markets. It overplays the fact that many entrepreneurs—as is the case with eBay—are driven more by pragmatic problems and politically arrived at solutions. Their metrics may be altogether different than economic theory. EBay's success depended on its ability to solve practical business problems. EBay executives discovered impediments to market growth and tried to solve the issue of trust and uncertainty in relationships but their solutions were not grounded in formalize economic models. The vision of a free, self-regulating market quickly faded as their attempt to build an online market confronted a number of challenges.

The network literature captures market relations precisely when they are stabilized and thus identifiable. The relative anonymity of many online marketplace purchases as well as the comparative ease with which online sellers operate in various sales channels means that relations between firms are more malleable. Although it is possible that a more consistent set of relationships between sellers and larger online marketplaces will develop as the largest firms continue to compete and retailers like WalMart move into this space.

If the ideas here are right, then we should expect to see an increasing amount of regulation in other aspects of the new economy and forms of social relations. And we do. Facebook is the most popular and populating online social networking site. It allows people to connect with their friends, and friends of friends of friends online to exchange photos, news, stories, and other snapshots of their life. As with eBay, Facebook and other sites like it were prime examples of the new world of reduced barriers and widespread social connection. However, Facebook has been embroiled in controversy over the past year as users become aware of exactly just how much of their life on Facebook is available to the public and the prying minds of corporations. The sudden realization and concern about privacy and private social space where one interacts with their friends away and apart from others has pushed Facebook to develop and increasing number of privacy tools—options that allow individuals to choose what information to share and the levels of "friendship" for various tiers of friends. The case of eBay suggests that this trajectory should not be at all surprising.

There is also an emerging number of markets where firms increasingly profit from the development of a platform or infrastructure that relies on the inputs of other firms. Perhaps this is more of an evolution of existing markets. Traditional production markets shifted, and continue to shift, as the relationships between lead firms and their suppliers shifts between more and less explicit coordination of production activities. We can see these early trends in the shifting production of electronics equipment and computers to contract manufacturing and in the apparel industry as large firms focus more on marketing and design and outsource production and distribution with Nike as one prominent example. Here, I posit that the e-commerce market driven largely by eBay and Amazon is converging on a different and new model where lead firms exhibit less control and exercise less power over independent contractors and smaller firms and have to manage these

relations in something closer to a democratic state. There is a tension over how much lead firms can, should and do control the marketplace.

Open source software systems and the explosion of portable, handheld smartphones and their corresponding operating systems and platforms are two areas where we see firms struggling to assert influence. The European Commission is developing a list of recommendations through the European Interoperability Framework advising European government agencies on the merits of proprietary or open-source software programs for managing their operations. As Microsoft and other firms line up on the side of proprietary software and Google, I.B.M, Oracle and Red Hat advocate for an endorsement of open source software. Aside from the obvious economic benefits that could accrue to the respective firms, part of what is at stake is how much control given firms should have over the design and alterations of any given system. Open source advocates argue that the universal standards in the open source community provide developers and governments more flexibility to adjust systems to their needs and contract with different software developers without lock-in to one technology.

Apple, Google, Microsoft and other firms are engaged in similar process of defining a new market in the development of new portable electronic devices—primarily phones and tablets. While much of the attention is rightly placed on the hardware produced by each company, the eBay story suggests that we also pay attention to the structure of the marketplace that gives these devices their ultimate utility: the application platforms and the software applications themselves. Apple, for example, generates increasing revenues from sales of music in its iTunes Store and software applications for its iTouch, iPhone, and iPad devices. For example, Apple earns 30% of the sale price of software applications sold through its online store. In a manner similar to eBay, Apple's strategy requires it to establish a marketplace, relationships with software application developers in order to earn profit through the sales of other firm's property whether it be music, books, TV content, games, or programs to let your social network know where you are at all times. Apple currently exerts a large amount of control and coordination on to whom it releases its code for software application development and what software applications it allows in its marketplace. As with eBay, Amazon, and other e-commerce competitors, other firms have entered this space with different arrangements. Google's releases its competing, open-source based Android operating system to multiple other device hardware developers—Samsung, HTC, etc.-- and undertaken a concurrent attempt to make application development easy by offering simple tools that allow nonspecialists the ability to create their own software applications. How these firms interpret and response to the actions of their principal competitors, manage their relationships with software developers, and the ease with which software developers can enter and exit each marketplace will be critical in determining the ultimate structure of the market.

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