Introduction
The emergence of e-commerce in the real estate industry has been met with a mixed response throughout the industry. Those who feared the technology tried to fight back using political power to suppress web based competition in the local real-estate markets. Others embraced the technology as a tool that would increase efficiency and visibility; and thus shifted their attention to areas of the real estate experience that could not be replaced electronically. But no matter the reaction, e-commerce made an inroad into the real estate industry that changed the terrain forever.

Past Predictions
In a 1997 article, Baen and Guttery predicted that the emergence of the web as an open medium for commerce would threaten the role of the real estate professional as a market intermediary. They predicted that the internet would provide increased consumer access to information which in turn would lead to an increase in for-sale-by-owner (FSBO) listings, and a decrease in the employment and income level of real estate professionals. This prediction was tied to the belief that real estate professionals derived their power from the proprietary information they controlled, and thus this power and their position on the supply chain would diminished once this information became more accessible on the internet.

At the time this sentiment was echoed by the National Association of Realtors (NAR). When first faced with the emergence of the internet in the industry the NAR fought to prevent the release of the coveted Multiple Listing Service (MLS). In 2003 the NAR proposed bylaws, that according to some, “illegally adopted rules that would discourage new real estate sales

* For the context of this paper the “real estate industry” has been narrowed to residential home sales of existing properties.
practices, including home sales over the internet and discounted realty services” by allowing real estate professionals to withhold their listings from online brokers.²

Actual Realization

The internet “has created a venue by which an agent can expose himself and his listings to literally millions of prospects.”³ Technology has allowed information once monopolized by the real estate profession to be transferred into a free service; however the assumption that the real estate professionals derived their position in the value chain primarily from the monopoly on the listing data was incorrect.¹ Consumers have increased access to MLS data online (See Figure 1 and Figure 2); however the names and phone numbers of sellers are withheld for privacy, forcing interested buyers to contact a realtor to set up an appointment. Consumers can utilize the access to the MLS data to narrow their in person property search before contacting a real estate professional. In 2002 it was estimated that 37% of buyers initially learned about the property they purchased through an internet search.⁵ MLS access can however be negative if a home does not photograph well; thus decreasing the number of individuals choosing to view the home in person.⁶

Figure 1 (Source: www.wesellalbuquerque.com)

Figure 2 (Source: http://www.idakelly.com/docs/losalamos_mls.pdf)
The real estate industry has not experienced the decline in employment and salary levels predicted by Baen and Guttery. Instead the amount of real estate brokers and agents registered with the U.S. Department of Labor has increased from over 107,000 in 1998 to over 182,000 in 2004; with the mean annual wage of brokers increasing from $54,210 to $75,330 and the mean annual wage of agents increasing from $37,260 to $50,440.\textsuperscript{7,8,9} During this same time period real estate prices have jumped 42% while broker fees have remained the same.\textsuperscript{10} Current brokers fees in the Albuquerque area average at 6%; these are typically split 3% for the listing agent and 3% for the selling agent.\textsuperscript{11} The utilization of the internet and other information technology has also facilitated the replacement of many low paying support staff with higher paid IT support staff.

The belief that the internet would lead to an increase in FSBO transactions proved incorrect. Instead the number of homes listed as FSBO has decreased from 18% in 1997 to 14% in 2004; and even these numbers may be deceiving. It is believed that approximately 32%\textsuperscript{12} of people that purchased FSBO properties knew the owners in advance of the transaction. Using these numbers, it would translate to less than 5% of real estate transactions being FSBO transactions on the open market.

There are several factors that could be attributed to the decline in FSBO transactions. The increasing complexity of the real estate transaction process, amplified by the large amount of legal requirements makes the process unattractive to most. The time it takes to market and show a home without access to real estate marketing services such as MLS or Realtor.com can also be a deterrent. And recently, there has been an increase in security concerns surrounding unscreened strangers walking through homes.
The dramatic rise in real estate values throughout the United States has also put most individuals choosing to list FSBO at a disadvantage. Determining the appropriate selling price can be a complex formula that not only benefits from numbers, but years of experience. The median FSBO selling price in 2004 was $163,800, while the average agent selling price was $189,000; 15.4% higher. The money many individuals try to save by listing their home FSBO is lost in the selling price. Using a typical broker fee of 6%, a seller utilizing a real estate professional would still come out 9.4% above a FSBO selling price. Real estate professionals assist in setting realistic prices, ensure proper documentation and disclosure, guarantee the appropriate inspections are completed, provide access to marketing channels that will attract qualified buyers, and provide emotional support. These actions can be assisted through utilization of the internet, but many can never be replaced.

**How Have Real Estate Professionals Survived the Emergence of E-commerce?**

Real estate professionals have survived the emergence of e-commerce in the industry because they bring more to the table than simply the MLS data they once coveted. Home purchases are typically the single most expensive investment an individual will make; and with this come extreme complexity. According to Linda DeVlieg, a Sales Associate with Coldwell Banker Legacy; real estate professionals are “getting paid for what we know, not what we do!” The average individual does not realize the amount of steps involved in selling or purchasing a home; as well as the variation potential within each step. The real estate professional is there to help “guide them through the maze.” The consumer is paying for the business process knowledge and interpretation not just the data. A real estate professional can offer expert opinion on listing price, location, inspection results, and legal documentation; as well as a network in which to market the property. As Channing Kelly explained it; “it’s a relationship business!” And relationships are one area that IT can not fully replace.
How has the Internet Given Some Real Estate Professionals a Competitive Advantage?

Real estate professionals that have embraced the internet and other IT resources have discovered a completely new venue of exposure. Many real estate professionals are using the internet as a marketing tool. In 2001 43% of Realtors listed a personal web page on their NAR member profile. Real estate professionals who want a competitive advantage are not only marketing their properties they are marketing themselves. One way some real estate professionals connect themselves to their web sites is through the name. Many agents who jumped on the technology were able to grab easy to associate URL’s. Some of the more common are actual names, such as www.stevemurtha.com, www.jimedison.com and www.davidcawood.com; these are easier for some consumers to remember. Other sites are associated with locations, such as www.wesellalbuquerque.com or www.corralesrealty.com When someone is driving through a neighborhood looking for potential homes, a quick visual referral to an easy to remember website can be very beneficial. Once a potential client views a real estate professionals’ website they have just minutes to sell their site and in turn themselves. Because people tend to scan websites instead of read them, the sites that will provide a competitive advantage use snappy headlines, engage the viewer in interesting text, and interact with viewers through desirable offers, in other words, make the viewer want to contact the real estate professional as a consultant.

According to Kalakota and Robinson; “availability is the accessibility of the e-business operation: 24 hours a day, 7 days a week, 365 days a year.” Customers go online for “real-time” gratification. There is nothing more gratifying than touring the house of your dreams from the comfort of your bedroom at 3am in your pajamas. Virtual tours provide 24 hour a day open houses; allowing many real estate professionals to do away with the traditional live open houses. The consumer of today expects instant gratification. Real estate professionals
providing web sites with pictures, virtual tours, and MLS searches, and e-mail updates increase there chances of satisfying the customers needs.

Early in the search process many consumers like to remain anonymous; something the internet provides. Consumers can spend time gathering information on the internet before they decide to approach a real estate professional for assistance. Many real estate professionals cherish the fact that their web savvy customers tend to be better educated about the market and available properties. This allows the real estate professional to spend more time filling in details for the client, versus starting from the basics.

**What are Some of the Novel Ways the Internet Helped the Industry in Doing Things (Invent Value) That Was Not Possible Before?**

The internet has changed the real estate industry by creating new avenues of communication and assisting in streamlining the industry processes. According to the Wall Street Journal more people than ever are shopping online for real estate. 28.8 million people shopped online for real estate in March 2004; up 18% from a year earlier. Virtual tours utilize 360° visual technology to display online home and community tours. Linda DeVlieg sold 13 homes sight unseen last year; something unheard of in pre-internet real estate. It was reported in 2004 that on Realtor.com virtual tours were found in 240,000 listings, this was over a two thirds increase from two years earlier. Clients may still require on site tours or realtor guidance in regards to things such as local traffic noise, commute time, and age demographics of the neighborhood. However, for consumers moving into a new city, the independent research that can be performed on the internet is highly beneficial. According to Linda DeVlieg, her clients moving from a different state are able to use the internet to increase their familiarity with the city and narrow property locations of interest. Prior to the availability of the internet most out of state clients would require 2 to 3 trips to Albuquerque, spending hours looking at homes all over
the city. With today’s technology, many clients require only one trip to look at a few homes they have pre-screened on the internet. The time savings for both the real estate professional and the client can be astronomical.\(^\text{13}\)

The internet has helped to facilitate constant communication between the client and real estate professionals. Prior to the infiltration of IT in the industry MLS data was distributed via runners or the U.S. Postal Service. It could take days for MLS data to be fully distributed. With the utilization of the internet and other information technology this data can now be distributed within minutes. An extension of this service is being provided through Coldwell Banker Legacy’s Personal Retriever\(^\text{®}\) service (See Figure 3). A consumer can go the Coldwell Banker Legacy webpage, and set up a home page where they specify their property search criteria. The Personal Retriever then searches for new properties that match the specified criteria and sends e-mail notifications of the new listings at the chosen intervals.\(^\text{14, 18}\)

![Figure 3](Source: http://www.cblegacy.com/pnLogon.asp?mn=1)

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The industry is also beginning to see an increase in available online transaction management systems (OTM).\textsuperscript{19} Sure Close® is an online transaction management system managed by Stewart Title of Albuquerque (See Figure 4). It allows all parties; realtors, buyers, sellers, title/escrow, settlement service providers, and lenders 24 hours a day 7 days a week visibility to all documents related to the transaction. The system maintains a list of completed activities, scheduled activities, documents, notes, and contact information for easy viewing. OTM systems assist the real estate professionals’ with maintenance of the transaction schedule, keeping all involved on “the same page,” and minimizes the amount of mistakes and miscommunications inherent in a complex transaction. Most OTM systems still require physical signature of the official documentation.\textsuperscript{20}

![Welcome to the future of real Estate](http://www.stewart-albq.com/sureclose/SureClose1a.htm)

**Figure 4** (Source: http://www.stewart-albq.com/sureclose/SureClose1a.htm)

Internet technology has also paved way for the virtual assistants (VA). The role of the assistant has changed. IT support has streamlined the process and a lot of agents choose to perform many of the administrative rolls themselves, or hire virtual assistance.\textsuperscript{6} 13 Virtual
Assistants are primarily home-based administrative support. They use the internet to perform many of the same duties as office staff. However, because the internet breaks down geographical boundaries a real estate professional’s VA can be located virtually anywhere in the world. Linda DeVlieg’s assistant lives in New York; there is no need for her to be in Albuquerque as she can arrange everything over the internet. Her assistant supports 10 agents that are spread throughout the country. Hiring a VA is much less expensive than maintaining a full time employee in the office. There are also VA’s that specialize in certain aspects of the real estate transaction or IT solutions. These VA’s advertise according to their specialty and offer their services for a fee.

Earlier we addressed the competitive advantage provided to some real estate professionals who maintain associated websites to themselves or their concentrated areas. One company that is trying to capitalize on associated websites, and take it to another level, is Agency Logic with its PowerSites™ (See Figure 5). PowerSites provide a means for showcasing websites for individual listings. Each listing is given a URL based on the property address (i.e. www.426Richland.com). Prices for a single site run $99 for the initial domain name registration and 12 months access. The sites include, homepage photos, full property descriptions, detailed property information (i.e. bed/bath, sq. ft., area, year built), important messages, detailed room descriptions, photo galleries that holds up to 50 photos, password protected documents, floor plans, area school reports, virtual tours, driving directions, printable brochures, mortgage calculators, and contact tools. PowerSites’ are a new way to provide individual property marketing on a mass scale.
The internet has also paved the way for online auctions. However, due to the wide variety of laws governing the sale of real estate, the online auctions sites cannot ensure the sale of the property to the highest bidder. Instead the online auction sites act more as advertising space.

The online auction site e-bay offers ad format, non-binding format, and binding format auctions.\textsuperscript{32} Ad format auctions are simply ad space for displaying the property (See Figure 6). No auction takes place and instead interested buyers submit their contact info to the seller through a “contact the seller” form embedded within the ad. The seller can then chose to contact the interested buyers. Non-binding auctions don’t involved binding commitments and are simply a means of advertising real estate and collecting potential buyer’s information. At the close of the auction the seller is expected to contact the high bidder to discuss entering into a contract. However, neither party is obligated to complete the transaction. Binding Auctions are intended to result in the sale of the property to the highest bidder. Using e-bays honor system, users are asked not to bid unless they intend to complete the purchase. The highest bidder is expected, but not obligated, to enter into a legal contract with the seller.\textsuperscript{32}
The online auction site RealtyBid.com takes the auction a step further by requiring a credit card number to place a bid. The person with the winning bid is sent a purchase contract via FedEx. This contract must be returned with a five percent deposit of purchase costs. The buyer has 30 days to close the transaction. If they fail to complete the paperwork or the closing process, a $350 penalty fee is charged to the credit card number provided.  

Utilization of e-commerce

According to Kalakota and Robinson “what sets the truly great organizations apart is their ability to use state-of-the-art e-commerce process to transform themselves.” They do the following three things well:

1. They redefine value for their customers.
2. They build powerful e-business designs that outperform the competition.
3. They understand customer priorities and consistently raise customer expectations to new heights.

With the large amount of real estate professionals in the industry, those that perform the above three things well are able to maintain a competitive advantage. Individual real estate
professionals are redefining value for the clients through the utilization of 360 degree tours, MLS access, and featured listings. Many have e-business designs that outperform the competition, such as websites with easy to follow layouts, frequently sought out information, and automatic new property notifications. They understand customer priorities and consistently raise customer expectations through increased access to information, and increased efficiency. What once took the real estate professional hours to days, such as the presentation of an offer can now take minutes. Offers can arrive via e-fax, can be reviewed with the client, and counter offers returned in minutes. In an e-mail interview with David Cawood he exclaimed that “Realtors who have embraced the new technology have a competitive edge because they are keeping up with the demands of the consumer. Consumers drive the market; not the Realtors. Consumers want tons of pictures, easy MLS searches, constant email of new listings, and the ability to buy or sell their home in hours or days, where the lack of technology in the past made the process much slower.”

E-commerce technology has made the above possible and those who refuse to embrace it in their practice may find it more difficult to attract the next generation of buyers and sellers.

**The Future**

The future of e-commerce in the real estate industry is very promising. The technology it has provided to the industry thus far has taken visibility and efficiency to new levels. This visibility and efficiency will be taken even further in the years to come. The industry will see many more online transaction management systems, and in time, the addition of digital signature.\(^\text{19}\) The acceptance of the digital signature across the industry will allow many more long distance transactions to be completed with ease. The technology will tear down geographic and 9-5 barriers; transactions will be able to take place 24 hours a day from geographic locations throughout the world. The paper trail will begin to diminish as all documents, with the digital
signatures, can be maintained on the online transaction management systems, and the clients handed or e-mailed electronic copies of the transaction.

Conclusions

Kalakota and Robinson discuss how the new e-business era allows new entrants to flood already competitive marketplaces, presenting customers with more choices.\(^\text{35}\) The internet has lowered the barriers to entry in the industry; however this has been followed by high turnover rates. IT can’t be the real estate professional’s only strength.\(^\text{6}\) To facilitate success it should be coupled with more traditional aspects such as networking and knowledge. It can take months of paying out money before any money is made in return, and individuals quickly learn there is more to the process than simply publishing a website.\(^\text{36}\)

Following with Kalakota and Robinson’s belief that “trend spotting helps you seize tomorrows opportunities before the competition does and to capitalize on them before the landscape shifts again.”\(^\text{37}\) The real estate professionals I spoke with consider the internet and other information technology an asset, and have tried to implement it in their services where it appears to add value. However, many also mentioned that some real estate professionals, who have been in the industry for many years, fear aspects of the technology and try to avoid its integration wherever possible. This is creating an opportunity for tech embracing realtors to seize market share in the changing environment.

It has been said that technology shifts power to the buyers.\(^\text{38}\) Buyers now hold much of the information once held completely by the real estate professional. But a professional is still often needed to interpret the data, and lead from the point of interest to the point of purchase. When potential clients are searching for houses they may also be searching for real estate professionals. The explosion of e-commerce means that real estate professionals must go the extra mile to attract and hold onto their clients.
Reference:

3. E-mail interview with David Cawood, Qualifying Broker, Albuquerque Real Estate Solutions, LLC retrieved on 12/9/05 from http://www.albuquerquearealestatesolutions.com/
6. Personal Interview with Channing Kelly, Co-Qualifying Broker, Realtors at Mossman Center on 11-14-05.
11. Phone interview with Angela Manning, Office Manager & Licensed Realtor with Lynn Johnson We Sell Albuquerque, Keller Williams on 12-7-05.
13. Phone interview with Linda DeVlieg, Sales Associate with Coldwell Banker Legacy on 11-11-05.
14. Phone interview with Paul Chavez, Marketing Director of Coldwell Banker Legacy on 11-7-05.
16. Phone interview with Jim Edison, CRS with Pargin Realty ERA on 11-9-05.
19. Phone interview with David Chavez, Realtor, formerly with Coldwell Banker Legacy on 11-11-05.
36. Personal interview with Angela Manning, Office Manager & Licensed Realtor with Lynn Johnson We Sell Albuquerque. Coldwell Banker Legacy. On 11/14/05.
Additional References: