

Real Estate Agents Will Lose Value as Digital Peer-to-Peer Exchange Platforms
Couple Exponentially with Technological Advancements

by

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Abstract

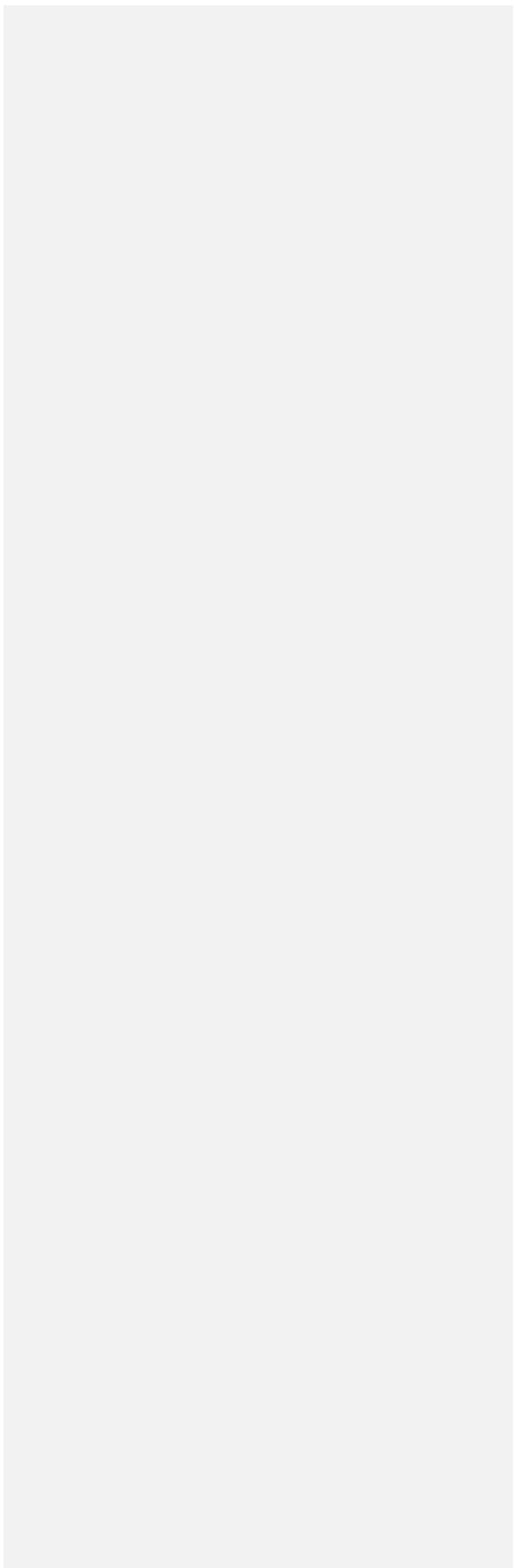
As technology collides with disruptive innovation, residential buyers and sellers will no longer want or need some or all services offered by a traditional real estate brokerage. Consumers are frequently becoming self-serving as they can now find a vast amount of housing information and apps through their mobile devices. Today's consumers are more cognizant of the fact that many brokerages throughout the US are now limiting their liabilities to protect their own company and maximize their profits through earning both sides of the commission thus eliminating undivided loyalty, protection, and full representation to the consumer. Furthermore, tech savvy buyers and sellers have watched numerous home programs and videos, have easy access to MLS and many other real estate websites, and will continually seek out money saving solutions while buying and selling their home. Like Uber and Airbnb, digital peer to peer exchange platforms coupled with built in algorithms and artificial intelligence will gain allegiance among future home buyers and sellers, thus creating new real estate models and fewer agents in the industry.

Keywords: algorithms, artificial intelligence, augmented reality, autonomous vehicles, buyer agent, designated agency, drones, dual agency, exclusive buyer agent, facilitator, FSBO, for sale by owner, listing agent, peer-to-peer, transaction brokerage, single agent, Uber, virtual reality, wearable technology.

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Chapter 1 Introduction

The purpose of this thesis is to prove to the real estate industry that advancements in technology, consumer knowledge, and the desire to save on commissions will minimize the role of a traditional real estate agent in the residential transaction. Numerous agents and brokers are failing to keep up with education and technology, thus diminishing their worth. NAR's *2016 Profile of Real Estate Firms* reveals three of the biggest challenges facing firms in the next two years as follows: 49% are concerned about profitability, 48% worry about keeping up with technology, and 35% fear competition from nontraditional market participant (NAR, 2016 b). Consumers of all generations are frequently becoming self-serving as they can now find a vast amount of housing information and apps through the internet. The NAR's *Home Buyer and Seller Generational Trends Report 2017 & 2016 Profile of Home Buyers and Sellers* further proves these thoughts through its statistics showing that currently 99% of millennials, 89% of older boomers, and 77% of the silent generation search for homes on online websites (NAR, 2017a). These tech savvy consumers have watched numerous home programs and videos, have easy access to MLS and many other real estate websites, and will continually seek out money saving solutions while selling or buying their home. Dual agency, dual agency with a designated agent, and transaction or no brokerage, though extremely profitable for the real estate firm, may become a concept of the past as sellers and buyers grow with technology, better understand their rights, and gain confidence in apps. It is inevitable that new business models and technologies will develop in the real estate industry. The *D.A.N.G.E.R. Report* commissioned by NAR, names Section A10 as a danger that the time is soon when the agent will be removed from the transaction. The report announces that "a tech company will soon crack the code and connect enough dots to conduct real estate transactions without the need of an agent" (Swanepoel, 2015,

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p. 39). The research in this thesis will display the current variant of perspectives by consumers, agents and brokers, and members of **NAEBA**, whom practice exclusive buyer agency. This research will broaden awareness of innovations industry wide both locally and globally along with how it could impede with their current business model. NAR's 2017 Real Estate in a Digital Age confirms that 42% of its consumer participants have in interest in smart home devices (NAR, 2017b). Uberization of the real estate industry will happen quickly. Like Uber and Airbnb, digital peer to peer exchange platforms coupled with built in algorithms and artificial intelligence will gain allegiance among future home buyers and sellers thus creating new real estate models and less agents in the industry. Only the prudent will evolve and **survive**.

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1.1 Definition of Terms & Acronyms

AI – Artificial Intelligence is the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

AR – Augmented Reality is a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view.

AV- Autonomous Vehicles – (also known as a driverless car, auto, self-driving car, robotic car) is a vehicle that is capable of sensing its environment and navigating without human input.

Chatbot - a computer program designed to simulate conversation with human users, especially over the Internet.

DYI – Do-It-Yourself

FSBO - For Sale By Owner

NAEBA – National Association of Exclusive Buyer Agents (NAEBA.org)

VR- Virtual Reality is the computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.

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Chapter 2 Literature Review

2.1 Technology and Residential Real Estate

The rapid rate of technological advancements continually change the day to day lives of individuals around the globe. Electronic chips, GPS, Wi-Fi, the web, sensors, and nanotechnologies are reshaping our reality in ways that we had only once imagined (Dastan, 2016). Warburton's doctoral dissertation on *The Role of Technology in the Real Estate Industry* states that

despite being one of the oldest industries in the world (Robertson, 2014), the real estate sector has traditionally been regarded as a laggard from a technology adoption point of view (Smith, 2015). By some estimates, the industry is typically five years behind the technology curve (Ferren, Entin, Millsaps, Cocosa, Edwards & Darragh, 2015).

(Warburton, 2016, p.1)

Although the industry may be lagging, no longer are real estate agents confined to their office to operate their business. The cloud has further permitted improved flexibilities to administer a higher level of professionalism, responsiveness, and competency through the ability to access crucial information that speeds up the process of the transaction (Warburton, 2016). Mobile technologies, which constitutes voice and data through a cellular connection, has made life portable. Smartphones, e-readers, tablets, notebooks have become on par with the functionalities of the traditional desktop computer (Warburton, 2016). Per *T3 Experts Key Trends Components*, 2014 was the year when mobile internet usage exceeded desktop internet usage and this move to mobile reveals a new layer of user behavior (Swanepoel, 2014). Warburton had similar statistics from Cisco Visual Networking Index that showed worldwide mobile traffic was up 69% in 2014, a staggering 30 times the size of the entire world's internet in the year 2000. In this same fifteen-

year period, cellular subscriptions went from approximately 738 million to 7 billion users in 2015. Cellular technology has massive improvements, lower costs, and the evolution of 2G to 4G technology (2016). Warburton feels this is the beginning of an age of “Supermobility” whereas “mobile has fundamentally shifted the way we live, work, play, communicate, collaborate and experience” (2016, p.36). *Advertising Age Magazine*’s writer George Slefo attended and interviewed several prominent players at the Mobile World Congress in Barcelona. Anna Bager, general manager of mobile and video at the Interactive Advertising Bureau is quoted, “Nothing will be ‘mobile’ anymore because everything will be mobile. 5G technology is being tested and the phone manufacturer Ericsson predicts some 29 billion devices to be connected by 2021. Smartphones will soon have sensors for robots, home devices that will allow it to communicate strictly machine to machine without needing a Bluetooth or wi-fi. Intel’s general manager of 5G, Rob Topol shares that

you will see more and more machines communicating with each other and they won’t necessarily communicate up through a network. There is no need for them to congest the network with information they are sending. They can just communicate with each other. (Slefo, 2017, pp. 17-19).

Mobile video is now encompassing more than 53% of global internet traffic. Video could possibly save both agents and buyers time and energy in their quest for finding the perfect property. And now, as millennials grow up, they are becoming our first-time home buyers and the bulk of our workforce. Their smart phones will become their primary source to access information and control other machines on demand. Consumers now and of tomorrow expect each experience to be instantaneous and applicable to them on a personal level (Warburton, 2016).

Wearable technology describes any personal accessory infused with electronic technology. Some examples are watches, removable or imbedded devices, glasses, bracelets, hats or clothing accessories. As Warburton points out, wearable technology is limited in its current capacity for use in the real estate industry or real estate consumer market. However, authorities foresee that these wearables will play a more significant role in real estate as consumers use it more (2016). Dastan's research shows that wearable technology is projected to expand from \$750 million in 2012 to \$5.8 billion next year in 2018 and devices shipped is anticipated to increase from 13 million in 2013 to 130 million in 2018. Wearable technology will evolve past its current benefits of working hands-free and remotely to become the "one mobile device that controls everything in that persons' world" (Dastan, 2016, p.63).

Today's unmanned air crafts, also called drones, are remotely controlled by a person from the ground. For the real estate industry, it is gradually becoming an inexpensive method to obtain aerial pictures of properties and neighborhoods. Some newer drone models are built with stabilizing components can climb walls and ceilings for 3D imagery inside a home. These advancements in technology along with legalities set forth in 2016 by the US Federal Aviation Administration has allowed drone usage to become an affordable option for an agent to market a property as well as a way for potential buyers to eliminate the need to visit the actual property in person. Drone development will continue to impact everyone, including the real estate market, in ways we have not yet even imagined (Warburton, 2016).

During the last several years, there have been substantial advancements for sophisticated control systems that can make your home smart. By engaging a mobile phone, artificial intelligence or controlled automation, a home's security, environment and electric can be monitored and precisely controlled (Li, Li, Mak, & Tang, 2016). Many smart homes are now

able to detect and learn from its owners' behavior patterns to help save the consumer energy and money and at the same time make the home more comfortable automatically. Products such as the Amazon Echo and Alexa can understand speech and can communicate with you as well as many of the smart devices added around the home. Many of these products interact through an app on your phone but will communicate to each other through radio waves called ZigBee and z-wave. Smart technology can unlock or lock a door, make your lights dimmer when you are watching television, make your lights brighter when you start cooking, and can communicate with your car to open the garage when you pull in the driveway, all without the help of a human (Li et al., 2016 and Naik, 2016). Smart homes will be able to avert potential disasters, such as a water leak, before they occur (Murphy, 2016). Applying these advancements to the future of real estate, a consumer selling a home can unlock the front door and turn on the lights for an agents' showing creating no more need for lock boxes and possibly listing agents.

Autonomous vehicles or driverless cars will modify many things including roads, accidents, car sales, and any aspects in real estate. In Armstrong's news report on *How Driverless Cars Will Change Cities*, an average car owner uses their vehicle only 4% making it an underutilized asset and 93% of car related accidents are the result of human error (2016). Manufacturers such as Lexus, Mercedes, and Volvo are investing in the research and development of driverless cars because they understand that a car will be notably safer once a computer is in charge. They are predictions that car ownership will decline and Barrie Kirk, executive director of the Canadian Automated Vehicles Centre of Excellence states, "that studies have shown that the millennials in general are moving away from car ownership" (Armstrong, 2016, p.1). The McKinsey Report suggests that consumers will be using driverless cars by 2030, however this could be sooner pending on adoption rate of transformative products. The consumer will be able to share a car

and use it as a “self-taxi” (Henderson & Spencer, 2016). Realistically, a location could become less important to a buyer, thus negatively impacting a property’s value. Driverless cars could give consumers the ability to select from a larger choice of locations thus further affecting markets such as senior housing or pick up a buyer and take them around to showing appointments without an agent or driver (Warburton, 2016).

In 2011, a US based company called Matterport started the development and manufacturing of 3D technology and cameras for sophisticated 3D interactive models, 3D virtual tours and VR tours (Matterport, 2016). A Wall Street Journal article states that commercial brokers and developers are using 3D virtual tours and virtual reality tours to boost leasing and sales by having their managing offices equipped with virtual reality headsets. They are even using this for buildings that aren’t even built yet to give the consumer the ability to see the view, the seating, the plantings with virtual staging (Morris, 2015). It is incredibly life like when you put the headset on and move your head side to side and up and down. You completely feel like you are in the room of a home. It fills your complete vision and you can see every detail clearly. “VR gives you the visceral feeling of being in that location and has the potential to make the process of searching for a house much faster,” says Matt Bell, cofounder and chief strategy officer of Matterport (Tracey, 2016). Some pros to using this type of technology for real estate are that it is easily shared through web applications, mobile device and emails, it expedites the stakeholder’s decision making process, it enables the evaluation of new construction within existing context, it can reduce design phases, and architectural design concepts can be easily understood by audiences of all levels (SGA Architects, 2016).

There are two types of reality in virtual technology. Virtual reality is “creating a completely virtual world without any reference to the real world” and is a wholly digital experience that

a person would find tough to extricate the virtual from the real (McKalin, 2013).

Augmented reality is when additional digital imaging is supplemented into reality such as the merger of interactive graphics with real world objects. (Warburton, 2016, pp.56-7)

VR and AR could make it easier for a consumer to buy a home without the need to visit the premises.

In the mid 1950's while attending MIT, John McCarthy was the first to use the terminology AI and defined it as "the science and engineering of making intelligent machines". Artificial intelligence is the ability to have a computer replicate a human's intelligent behavior with little or no human involvement. Robots were invented in an effort to replace workers doing unskilled jobs on a manufacturer's assembly line. However, now with the progress made with artificial intelligence, it is forecasted that by 2020 both unskilled labor and many professionals will be impacted in many ways by intelligent machines (Warburton, 2016).

A recent report indicates that capital investments into AI and robotics has grown by 70% each year since 2011 (Deloitte University Press, 2015). The overwhelming evidence suggests that the influence of AI and robotics is likely to grow in the coming years. By 2025, artificial intelligence is predicted to be built into "the functions of business and communication, increasing relevance, reducing noise, increasing efficiency, and reducing risk across everything from finding information to making transactions" (Smith and Anderson, 2014). (Warburton, 2016, pp.66-67)

In today's home, many consumers are already using Siri, Cortana and Alexa. The next generation of smart homes will have affordable robots that interact with humans through voice recognition. Li, Li, Mak, and Tang's research paper gives two examples. The first is Robot Rovio, which is on the market, is a mobile robot that is armed with webcam, microphone,

speakers, and integrates with other smart home devices such as the Roomba vacuum. The second robot named Zenbo is starting to take pre-orders. Zenbo was developed in Taiwan, roams around the home seeing things through its camera that has facial recognition. It communicates to humans through voice recognition and can control many smart things around the home (Li et al., 2016). Artificial intelligence can continually learn about its users to become increasingly effective at tracking and organizing one's information as a virtual personal assistant (Naik, 2016). Artificial intelligence will impact the real estate industry over the next five years through virtual agents and chatbots that will take the place to field consumers questions and automate discussions with instantaneous precision. Some questions require thought and others do not. Human contact will still play a vital role in the real estate process. However, this automation of communication will streamline things for agents, freeing up more time to work with additional customers and clients (Li et al., 2016). Artificial intelligence will use Natural Language Processing and Image Recognition to automate the vast amounts of paperwork associated with a real estate transaction eliminating mistakes and illuminating efficiency to the satisfaction of both the agent and consumer (Murphy, 2016). Other notable advantages of products with artificial intelligence are that it makes decisions based on facts rather than emotions, it can work 24/7 and never tires, and it can communicate knowledge and copy it to other devices quickly compared to training its human counterpart. Presently, there are several shortcomings associated with artificial intelligence such as an absence of common sense, inability to have a creative response, a malfunction could result in giving the wrong answer, and ultimately could be used for mass destruction. There are current limitations to artificial intelligence but tomorrow's potential is developing at a swift rate (Naik, 2016). Technology has given the consumer the ability to do many things associated with buying or selling a property. Many would argue that a robot will

never replace a real estate agent, yet in the 1990's, the majority of people would never use a credit card over the internet either.

2.2 Residential Real Estate and Consumer Driven Needs

Technology has also opened a world of transparency in our society. Transparency refers to honesty, accountability, and openness. Though considered appalling in today's cultural standards, before 1992 Realtors®, real estate agents, and brokerages worked with homebuyers but never represented them. It did not make a difference how many brokerages were involved in the transaction, the only party ever represented was the seller (*Horiike v. Coldwell Banker*, 2016).

The FTC discovered and exposed this problem when it conducted an in-depth study of the real estate industry in the early 1980s. (FTC Report, *supra*.) The FTC found that “in most cases the unrepresented buyer believed that the licensee with whom he worked – the selling or cooperating agent he had ‘engaged’ and who had found the property for him – was actually his agent.” (Olazábal, *supra*, 40 Harv. J. on Legis. at p. 72, citing FTC Report at p. 69.) Indeed, 74% of buyers – and more than 70% of sellers – surveyed by the FTC believed that the associate working with the buyer represented the buyer, when, in fact, he or she actually represented the seller. (*Ibid.*) (*Horiike v. Coldwell Banker*, 2016, p.8)

Rules were changed by the National Association of Realtors® in 1992 where every state would develop a standard agency disclosure form that would be mandatory in residential real estate sales. Even with the agency disclosure form present, many agents and consumers still find these forms difficult to explain and comprehend. Another shortfall is the difficulties in monitoring and enforcing the mandatory disclosure. The law of agency, as a disclosure form, if given to the consumer to be properly read and understood might

help the consumer decide on a more informed choice, as well as preventing an agents' ability to strategically encourage in-house transactions thus further reducing consumer advocacy (Han & Hong, 2016). In a recent California Supreme Court case, the National Association of Exclusive Buyer Agents filed an amicus brief on behalf of the plaintiff because they feel transparency is, more often than not, deficient in the real estate industry (Kalfus, 2016). Technological advancements flooded everyone's lives with information, yet Kalfus quotes in his article that "salespersons commonly believe that there is no dual representation if one salesperson 'represents' one party to the transaction and another salesperson employed by the same broker 'represents' another party to the transaction. The real estate industry has sought to establish salespersons as 'independent contractors' for tax purposes and this concept has enhanced the misunderstanding of salespersons" (2016).

As mentioned above, Han and Hong's research shows that 80% of residential buyers and sellers use a licensed real estate agent to perform their transaction, yet there is apprehension that the consumers' interest in the transaction is compromised through various industry enticements (2016). Today, as consumers engage their interests in buying or selling a home, they will conduct research on the internet educating them on commissions, the real estate process, and the types of agencies involved in a transaction. Consumers are now cognizant and recognize value in single agency representation when paying for broker compensation. This along with agency disclosure laws has a direct impact on helping the consumer to make a more knowledgeable decision (Han & Hong, 2016). Han and Hong's Canadian study on the effect of the implementation of the Real

Estate and Business Brokers Act of 2006 a downward shift for in-house transactions in their sample. (2016).

Sub-agency continues to be legal in many states and is a prime example of how law is designed to be for the good of the real estate industry and not for the consumer. In a sub-agency situation, the agent whom is working with the buyer is not representing the buyer which means the agent is working only for the seller as a subagent of the listing broker. This does include an agent employed by a different real estate brokerage, as that agent would be considered a cooperating agent under sub-agency. As mentioned in the NAEBA's friend of the court brief acknowledges that sub-agency leaves buyers unrepresented with the brokers owing no fiduciary duties to them, thus allowing the "listing brokers, cooperating brokers, and their associates to work with both buyers and sellers with little fear that they would be accused of acting as undisclosed dual agents" (Horiike v. Coldwell Banker, 2016, pp. 8-9).

Transaction Brokerage, also known as a facilitator, neutral broker or broker's agent depending on the state, is another form of legal agency in many states. This form of agency is more a neutral "go between" or a personal assistant that offers no representation for the buyer or seller and no liability to the acts of these brokers or agents yet allows for the brokerage to double dip on commissions. Florida statute states that "it shall be presumed that all licensees are operating as transaction brokers unless a single agent or no brokerage relationship is established, in writing, with a customer" (FREC, 2017). States such as Colorado and Florida made this the default role for brokerage and note that in Florida, a disclosure form is not required by law to be shown,

explained, or signed by the buyer or seller leaving most consumers with the assumption that their agent is working for them when, in fact, they are not.

Dual Agency is an agent representing both the buyer and the seller in the real estate transaction. As shown below in Table 1 through research conducted on behalf of this project, it is currently illegal in eight states and in those states where it is legal full disclosure and informed consent must be made to both parties in the transaction. Gardiner, Heisler, Kallberg, and Liu's empirical analysis of dual agency shows that dual agents do uncover confidential information about each of their clients in the transaction and are given the opportunity to exploit this information thus reduced the sales price and decreased the time frame that the home was on the market both before and after legislation of disclosure (2007). In 2013, the U.S. Department of Housing and Urban Development acknowledged that there are innate complications of dual agency and wrote in a July 9, 2013 letter regarding short sales that "no party that is a signatory on the sales contract, including addenda, can serve in more than one capacity.... brokers and their agents may only represent the buyer or the seller, but not both parties. NAR protested and HUD removed the dual agency ban" (Horiike v. Coldwell Banker, 2016, p. 18). Dual Agency with a designated salesperson is legal in some states when both the buyer and the seller provide informed consent in writing that the broker will elect another sales agent from their office to represent one of the principals in the transaction to negotiate and represent on his or her behalf. This form of agency can also easily manipulate a transaction to benefit the real estate firm leaving the principals with little protection. There was not an available table with all of the US states and their legal forms of agency practices, through research and contacting agents from every state, the

chart below was established and will be discussed in the following chapters of this project.

Table 1 -Current US Agency Practices					
States	Dual Agency	Designated Agency	Transaction Broker, Broker Agency, Neutral or Facilitator	Single Agency for Buyer or Seller	Sub Agency
Alabama	Yes	No	Yes	Yes	Yes
Alaska	No	Yes	Yes	Yes	No
Arizona	Yes	No	No	Yes	Yes
Arkansas	Yes	No	No	Yes	No
California	Yes	No	No	Yes	Yes
Colorado	No	Yes	Yes	Yes	No
Connecticut	Yes	Yes	No	Yes	Yes
Delaware	Yes	Yes	No	Yes	Yes
Florida	No	No	Yes	Yes	No
Georgia	Yes	Yes	Yes	Yes	Yes
Hawaii	Yes	Yes	No	Yes	Yes
Idaho	Yes	Yes	No	Yes	Yes
Illinois	Yes	Yes	No	Yes	Yes
Indiana	Yes	No	Yes	Yes	Yes
Iowa	Yes	Yes	Yes	Yes	Yes
Kansas	No	No	Yes	Yes	No
Kentucky	Yes	Yes	Yes	Yes	Yes
Louisiana	Yes	Yes	No	Yes	Yes
Maine	Yes	Yes	Yes	Yes	No
Maryland	No	Yes	No	Yes	Yes
Massachusetts	Yes	Yes	Yes	Yes	No
Michigan	Yes	Yes	Yes	Yes	Yes
Minnesota	Yes	No	Yes	Yes	No
Mississippi	Yes	No	No	Yes	Yes
Missouri	Yes	Yes	Yes	Yes	Yes
Montana	Yes	Yes	Yes	Yes	No
Nebraska	Yes	No	Yes	Yes	Yes
Nevada	Yes	Yes	No	Yes	No
New Hampshire	Yes	Yes	Yes	Yes	Yes
New Jersey	Yes	No	Yes	Yes	Yes
New Mexico	Yes	Yes	Yes	Yes	No
New York	Yes	Yes	Yes	Yes	Yes
North Carolina	Yes	Yes	No	Yes	Yes
North Dakota	Yes	Yes	Yes	Yes	Yes
Ohio	Yes	Yes	No	Yes	Yes

Oklahoma	No	No	Yes	Yes	No
Oregon	Yes	Yes	No	Yes	Yes
Pennsylvania	Yes	Yes	Yes	Yes	Yes
Rhode Island	Yes	Yes	Yes	Yes	No
South Carolina	Yes	Yes	Yes	Yes	Yes
South Dakota	Yes	Yes	Yes	Yes	Yes
Tennessee	Yes	Yes	Yes	Yes	Yes
Texas	No	No	Yes	Yes	Yes
Utah	Yes	Yes	No	Yes	Yes
Vermont	Yes	Yes	Yes	Yes	Yes
Virginia	Yes	Yes	Yes	Yes	No
Washington	Yes	Yes	Yes	Yes	Yes
Washington DC	Yes	Yes	No	Yes	No
West Virginia	Yes	No	No	Yes	Yes
Wisconsin	Yes	Yes	No	Yes	Yes
Wyoming	No	No	Yes	Yes	Yes

Table 1 Current US Agency Practices

Although consumers tend to believe that agency goes hand in hand with the real estate agent's commission. Gardiner's study confirms that there is existing case law regarding agency disclosure which reveals "the obligation of either the seller or buyer to pay compensation to a broker is not determinative of the agency relationship" (Gardiner, Heisler, Kallberg & Liu, 2007, p. 6). Diminutive of protecting the consumer, Sub-Agency, Transaction Brokerage, Dual Agency, Dual Agency with a Designated Sales Agent all allow in-house transactions which creates several benefits for real estate firms that practice in this manner. Examples of this would be your CPA also acting as an agent of the IRS or your attorney representing both you and your soon to be ex-spouse in a divorce. The study on transactions involving a dual agency relationship noted a lower sales prices and a shorter time on the market. This in effect means that the sellers may have lost financially in these situations (Gardiner et al., 2007). It has also been noted throughout the industry that there is less incentive for the listing agent to get a higher price than to increase the housing turnover (Blas, 2009). Han and Hong propose that in-

house transactions could produce informational benefits and lower transaction cost, and particularly in a hot market, agents may have a strong incentive to match in-house inventory with in-house buyers to clear inventories in order to devote more time competing for new buyers and sellers (2016). One commonality is clear, there seems to be misinterpretation and uncertainty among buyers, sellers, and brokers as to what their lawful duties are to one another and how these duties correlate to the traditional roles that brokers have played in the residential housing market (Yang, Hong, & Seiler, 2015).

The Amicus Brief explains that “consumers and associates stand only to gain from the laws that, properly read, promote even-handed access to information about a piece of property, because symmetrical access generates increased sales and fairer prices for buyers and sellers alike (Miceli et al., supra, 39 Real Est. L. J. at pp. 483-490)” (Horiike v. Coldwell Banker, 2016, p. 18). Although state legislature and brokers believe that in-house transactions are acceptable given the consumer has proper disclosure, consumers are now researching the real estate law and process before they begin. Consumers are seeking out representation when buying and other alternatives when selling. Consumers want to save money. Buyer representation will save a client time and money. In a Tampa Bay Times article, the NAR’s 2013 statistics revealed that FSBOs make up only 9 percent of sales, yet Owners.com argues that 33 percent of homeowners sell without using a traditional agent (Martin, 2015). Survey Monkey had also conducted a survey named *4 Real Estate Trends That Show a Changing Industry* and found that 17 percent of buyers bought a home without an agent over the last two years (2015). The 2016 NAR Profile of Home Buyers and Sellers shows that only 8 percent of sales were FSBOs, stating the lowest recorded share since 1981 (2016a). These percentages could

be skewed as some consumers do sell their property technically “on their own”, though they bought a low, fixed-fee package that placed their property on the MLS. In a controlled study done on the MLS versus FSBOMadison.com there was “no support found for the hypothesis that listing with a realtor and appearance on the MLS delivers a higher sale price (before subtracting commissions) than the FSBO transactions” (Hendel, Nevo & Ortalo-Magne, 2009, p. 1879).

Many proponents in the real estate industry, including NAR, will argue that agents deliver a multitude of valuable services in addition to access to the MLS. There is consistence that these services include market information, guidance, promotional services, assistance with paperwork, legal matters, screening prospects, negotiating, and coordination of showings (Blas, 2009 & Bernheim & Meer, 2007). A recent Housing Wire article quoted Heller, the CEO of Keller Williams, saying that “even with more technology and a stronger market, we (meaning Keller Williams) are seeing fewer people doing it on their own. Buyers and sellers still need advice and interpretation of data that is available to them, and they still need that expert guiding them through the transaction” (Swanson, 2016). On the other hand, some consumers think that sites such as Zillow, Realtor.com, and Trulia may eventually replace their need for a real estate agent. Martin interviewed a woman who sold her \$730,000 home without an agent after paying only a few hundred dollars for photos and posting on her local MLS and other online sites because she feels “commissions are a lot of money and she needed to get the biggest bang for the buck” (Martin, 2015, p.1). Unbundled or a la carte services could benefit consumers in a way tailored to their needs. A small but increasing number of brokers are offering these services. Many brokers have succumbed to pressures within their real

estate board and some MLSs have adopted their own rules to prevent or disjoint the practice to become a non-traditional brokerage. The FTC and DOJ have taken active roles in challenging the practice and laws that support bundling because it arguably reduces competition and essentially forces some consumers to buy unwanted services (Bernheim & Meer, 2013).

The internet will continue to deliver new consumer standards by the development of e-business models, thus forever altering how many industries will operate in the future. Developers believe that successful traditional businesses will expand into a hybrid brick and mortar/online model. Algorithms and artificial intelligence will allow online real estate brokerages to offer new services through mobile applications. Both these internal and external factors such as new competitors in the field, legal and regulatory changes, technology, and consumer preferences, will strengthen the metamorphosis of the real estate e-business model (Cherif & Grant, 2014). Another recognized platform in the real estate industry is auction sites which operate by allowing prices to fluctuate to the current market condition, but now peer to peer sites such as Airbnb, Etsy, Amazon, and Uber use automated algorithms to self-adjust prices in real time (Einav & Levin, 2016). New real estate models are emerging quickly to the marketplace (Lane, 2014). Zillow Group recently launched a new real estate portal, Realestate.com, to appeal to the millennial market segment, and others, such as LevelRE, SRE Matrix, Open Door, Buyer Price, and Houwzer are designed to appeal to those who want to save on commissions (RIS-Media, 2017). The cofounder of Houwzer, Kevin Baird, whom is a local real estate developer, attorney, and entrepreneur, was reported that “homeowners are changing and are taking over the role of the traditional seller-agent. Sellers’ agents’ commissions aren’t justified

anymore. This model will change everything about residential real estate nationally” (Arvedlund, 2015). Survey Monkey’s blog revealed that 64 percent of their survey participants are open to an alternative to a traditional full service broker, whereas a mere 21 percent will continue to work with a traditional broker (2015). The survey below was also included and performs a further breakdown of reasons why these consumers decided to buy their home without the help of an agent (see Figure 1).

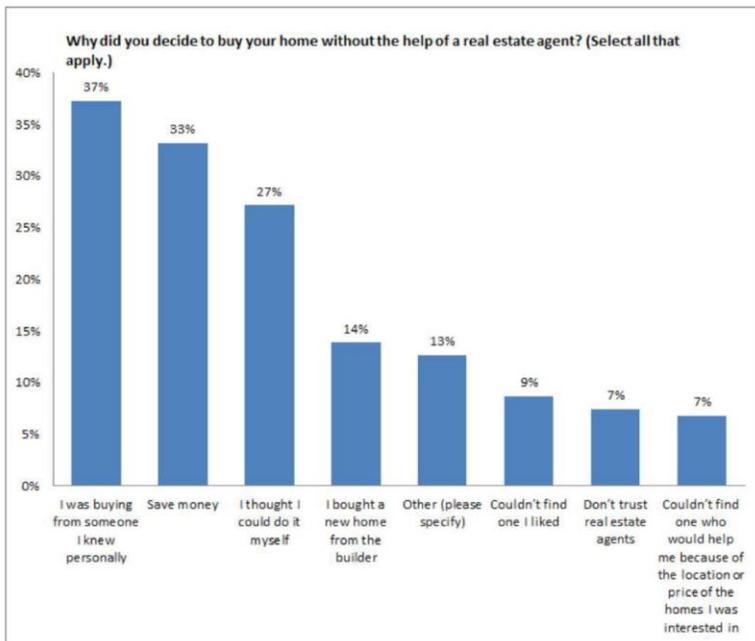


Figure 1. Why did you decide to buy your home without the help of a real estate agent?

(Survey Monkey, 2015)

2.3 Evolution of Peer to Peer Markets

Twenty-two years ago, Pierre Omidyar created a consumer auction website known as eBay. This was the beginning of the evolution of peer to peer and DIY markets that allowed small

sellers to compete with traditional suppliers of both goods and services. Today, consumers of all generations, but particularly millennials, need to control everything through their mobile device to attain, convenience, trust, savings, and instant gratification (Einav & Levin, 2016). Market transactions require trust, and when eBay began there was a certain hesitation toward the concept that a person would send money to a nameless seller and the seller would reciprocate and send the merchandise as promised. At first, consumers were leery to use monetary services as PayPal or to make a payment online with a credit card. Today that is considered a society standard with consumers seeking out even faster ways to pay for things. A person to person market place generates trust through guarantees of quality, peer reviews, and reputation systems (Einav & Levin, 2016). Sundararajan writes that “over the last ten to fifteen years we have witnessed the “consumerization” of information technologies, whereby radical information is driven by the needs of the consumer rather than of businesses or government” (2014, p.3). Hundreds of millions of consumers have mobile technology at their fingertips and increasing familiarity is spurring the development of more “digital institutions”. These platforms have become the mediator of “human meets exchange” and Sundararajan explains that this evolution is fueled by globalization, the rise of urbanization in the US, and ecological and resource considerations. According to the UN, the global urban population will double by 2050 and cities are considered “sharing economies”. Knowing this, many peer to peer business models signify using less resources and making a smaller ecological footprint. In our current economy, Airbnb has risen to the equivalent of a large hotel chain with over 2 million listings (Sundararajan, 2014). Uber has a valuation of estimated worth of both Hertz and Avis combined (Hayden, 2014).

Hayden reasons that the real estate industry is next to be uberized. The need for agent services is becoming a significantly less valuable as technology feeds the consumer instant

information and interactive apps. Consumers are becoming more comfortable with the notion of selling their own homes. There will always place in the market for educated and professional agents with a specialized niche, but the consumer no longer wants to spend commission money on someone who only holds a door open for showings (Hayden, 2014). Zillow has surpassed Realtor.com by a lead of more than 21.4 million unique visitors in April 2015. More sellers are utilizing the “quasi-FSBO” approach. Luxury homeowners are using digital tools to easily place their home on the market for free on sites such as Zillow and Trulia. For a small fee, sites like Owners.com and ForSaleByOwner.com will place the property on the local MLS (Kamping-Carder, 2015). Consumers in many professional occupations including Maz Hagemrad, an engineer who used BuyMyPlace, says he “likes the idea of being in control of costs and knowing where the process is going” (Duncan, 2016). BuyMyPlace DIY kit is successful in the Canadian and Australian real estate markets that has disrupted the traditional real estate model. In an interview with KordaMentha’s co-Founder, Mark Korda, he states, “BuyMyPlace is licensed in every state of Australia, and has generated vendor savings between \$15,000 and \$19,000 average, based on an average property value of about \$600,000. Investing in BuyMyPlace was strategic given the housing boom, KordaMentha, which is diversifying into technology, data analytics and property said” (Su-Lin, 2016). As technology increasingly eases the entire listing process, many consumers will agree that they have no necessity for a listing agent. As found in the Hendel, Nevo and Ortalo-Magne study of MLS versus FSBOMadison.com “there is no evidence that MLS provides any price premium over FSBO. Considering the realtor commission versus the FSBO fee, FSBO sellers come out ahead financially” (2009, p.1893).

Technology accelerates exponentially, thus the future is coming much faster than we think. Uberization which means the removal of the middleman is happening now (Collins, 2016). The

largest of corporations are vanishing, being divided, or having stock shares bought back, and there are not many new IPO's in sight. The Uber culture is infiltrating organizational design and management by turning these tasks over to programmers and developers writing algorithms (Davis, 2015). Technology is blurring of lines between what is personal and what used to be professional. Many peer to peer platforms will continue to have an intermediary, so a real estate broker may still be involved with some unbundled services, but technology companies are designing products with a primary use for the consumer instead of being directed for the business user and modified for the consumer as an afterthought (Sundararajan, 2014).

Chapter 3 Research and Results

The overview of the three survey objectives was to design, administer, and analyze collected data from each survey to demonstrate the necessity of those in the real estate industry to become more aware and prepared for future changes and challenges in their industry due to the exponential rate in the advancements through technology. All three surveys were reviewed by a small focus group to ensure that all survey questions were easy to understand, an answer, and in an effort for full survey participation and completion. All three surveys were uploaded on Survey Monkey, an online survey hosting site.

3.1 Survey 1- Consumers

The consumer survey was a targeted sampling through use of 257 (23 emails addresses were non-forwardable) friends, family, past clients email March 31, 2017. On April 1st, a Facebook Personal Page post with a link directly to Survey Monkey was installed. This survey was also posted on two business accounts with an advertising boost that went out to 1014 people with the following criteria: exclude real estate agents/brokers, any between the ages between 24-75+, income of \$30,000+, resides in the US. With the use of paid advertising, analytics showed 16 clicks to the survey link. Both email and Facebook did ask viewers to share or forward to others to distribute for additional surveys participation. This survey was closed on April 8th. This twenty-eight question survey was a derivative of quantitative and qualitative methods producing closed-ended and open-ended questions. A final reminder was sent out as a second Facebook post on the personal account on April 5th and concluded with 128 total surveys. There were some questions that some participants did not respond to and will be notated in the results. Overall, the post collection process gave a large enough sample size to attain a 95% confidence level.

3.2 Survey 2- Agents/Brokers

In order to perform a targeted sampling specific to real estate agents or brokers, twenty-one agent or broker friends/acquaintances email addresses were accessed from my business email account on March 31, 2017. On April 1st, my Facebook personal page was posted with a message to agents and brokers along with the Survey Monkey linked to this survey. Posts were also placed on my two business accounts also with an advertising boost that targeted and reached 2707 real estate agents and brokers any age across the US. Results from the paid boost analytics showed 34 clicks to the survey link. In both collection processes, the audience was asked to share or forward to other agents and brokers for a larger response rate. The survey was closed on April 8th. This twenty-three question survey used both quantitative and qualitative methods. The open-ended questions were reviewed and coded. In an attempt to achieve a well-rounded representation of US agents and brokers, on April 5th, 250 emails were sent to random agents in specifically selected states through the use of the Realtor.com agent search. A reminder was also posted on the Facebook personal account on April 5th. Upon collection closing, there were 65 total responses. There were some questions that some participants did not respond to and will be noted in the results.

3.3 Survey 3- NAEBA Members

The NAEBA Members survey is an internal survey that was targeted to only members of this organization known as the National Association of Exclusive Buyer Agents (NAEBA.org). As a member, I obtained 115- member email addresses from the NAEBA members-only referral site. Six email addresses were not functional at this time. 109 surveys were sent on March 31th, 2017 with follow up emails sent on April 5th. The survey was also posted as a reminder on the NAEBA's closed members group on Facebook. According to Survey Gizmo, internal surveys

generally receive a 30-40% response rate on average (Survey Gizmo, 2017). The NAEBA Member survey concluded with 45 responses upon closing out the survey on April 8th receiving a 41% rate. NAEBA members believe in consumer advocacy of single representation for either the buyer or seller in the real estate transaction. There aren't that many NAEBA members, but membership is spread throughout the US giving a fully represented view of this population.

3.4 Results and Analysis

All of the survey results were analyzed by an independent statistician who performed the chi-square test to compare proportions across the three groups of respondents. Data collected on the consumer survey confirmed a well-rounded sampling of consumers in the millennial, generation X, baby boomer and the silent generation that lived in either a rural, suburb, or city lifestyle. Generation Z was not included in this survey. The graphs below show the breakdown of age groups and type of lifestyle:

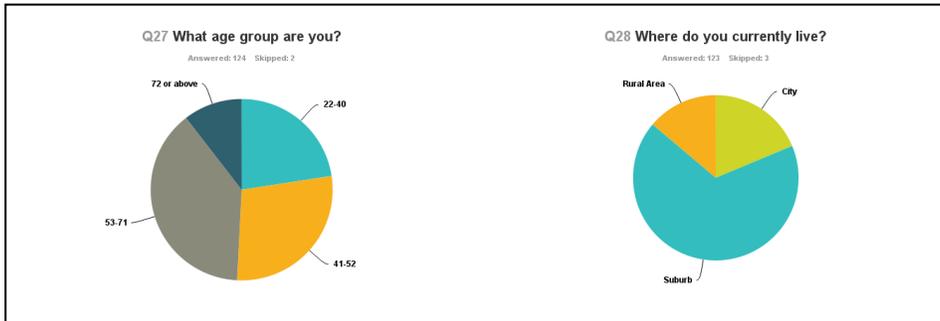


Figure 2. Demographics and lifestyle of consumer participants.

Questions 1-5 gave some opinion toward real estate agents, basic terminology knowledge, and future trust toward the real estate industry. 63% of consumers felt most agents and brokers care more about making commission than the consumers interest in the real estate transaction and when asked if the consumer thinks the agent is represent their best interest in the transaction 34%

wasn't sure and 26% said no, leaving only 40% of consumers feeling that they are being represented. Consumers are somewhat knowledgeable with real estate terms as a yes or no answer though quantitative, doesn't guarantee comprehension. 78% of consumers said that they understand what a buyer's agent is, 52% knows of dual agency, and 60% know what the term fiduciary duty stands for. Consumers are savvy shoppers in-tune with technology showing nearly 80% utilizing apps such as Uber, eBay, Airbnb and watching real estate related programming such as House Hunters, Fixer Upper, Flip or Flop, etc. The top five websites for real estate in order of "most importance to you" came out with Zillow on top, their local MLS as second, followed sequentially by Realtor.com, Trulia, and Redfin. Although the survey submits that 59% of consumers would allow buyers to see their home via the use of a lockbox or e-key and the same percentage feel confident negotiating and accepting an offer without using a listing agent, 67% still believe that using a licensed listing agent or broker will sell their home faster or for a higher dollar amount. In the chart below, a comparison of the same question was presented to all three survey groups. The NAEBA members have the highest confidence level at 25% of AI as a virtual agent as opposed to agents/broker at only 15%, with consumer mid-way at 18.5%. This trend can be noted in several questions that were analyzed.

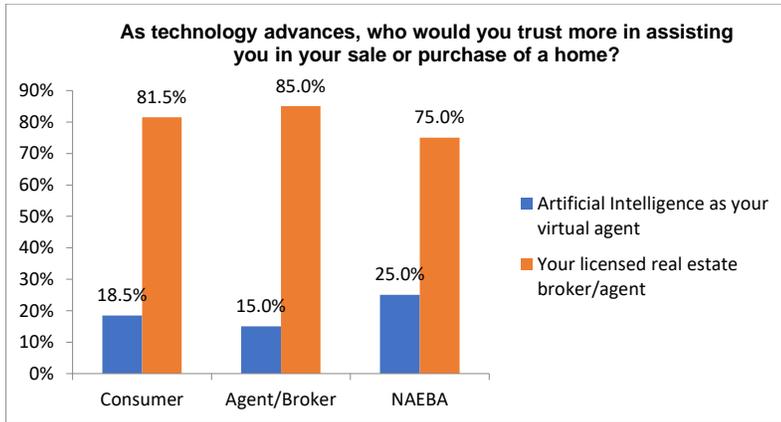


Figure 3. Comparison of views. This figure illustrates who the Consumer, Agent/Broker, & NAEBA member would trust more in real estate transaction (AI vs. R.E. Agent).

Another congruency was noted when equating the responses of only the consumer to Question 10 and 17, and then Question 11 and 18.



Figure 4. Consumer view in today's market of selling and buying a home with a new real estate app to save on commission.

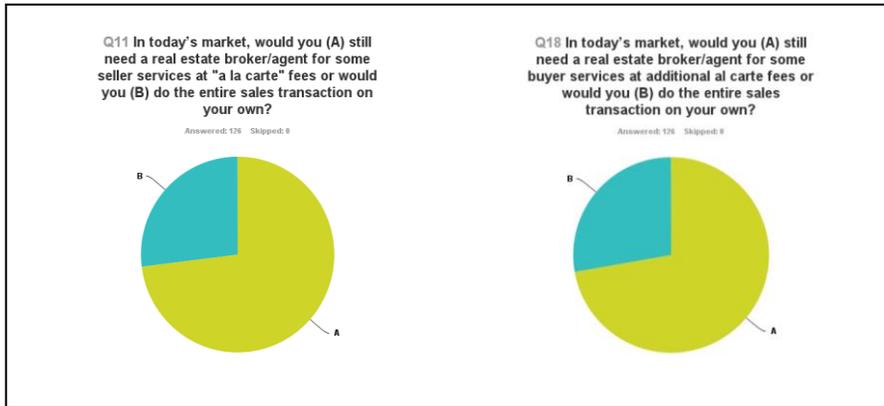


Figure 5. Consumer view of "a la carte" service vs selling or buying on your own.

The consumer has a significant interest in using a real estate broker or agent for certain buyer or seller services on an "a la carte" fee basis.

Agency Disclosure and the proper practice of its legal forms in each state was not prominently accountable in the Agent/ Brokers survey. The data obtained from the Agent/Broker survey was erroneous from Questions 21-23, and in most cases, did not add up mathematically nor did it coincide with the US Agency Disclosure Table designed for this project. To produce Table 1 on page 14, emails and calls were made to agents and brokers along with searching the web for an agency disclosure law in every state. Many of the state disclosure forms were difficult to interpret in designing the Table, and when the survey asked the agents/brokers if they think their state's agency disclosure form is easy for everyone, including them, to understand 42% said no. While calling random agents and brokers throughout the country, many did not know what a disclosure form is, was not capable of explaining the form, or described what they were performing as a true buyer agent when it was indeed dual agency with a designated agent. over

the phone. This was part of this thesis because agency is colluding with technology as the consumer becomes better educated and demands either representation or paying less for less services and fiduciary duties. It is indeed interesting to compare the results side by side on the graphs below regarding an agent/broker versus a NAEBA member view on if the real estate industry would be better for the consumer if laws were changed so that all sellers are represented by the listing agent and all buyers are represented by their buyer brokerage thus eliminating Transaction Brokerage and Dual Agency all together.

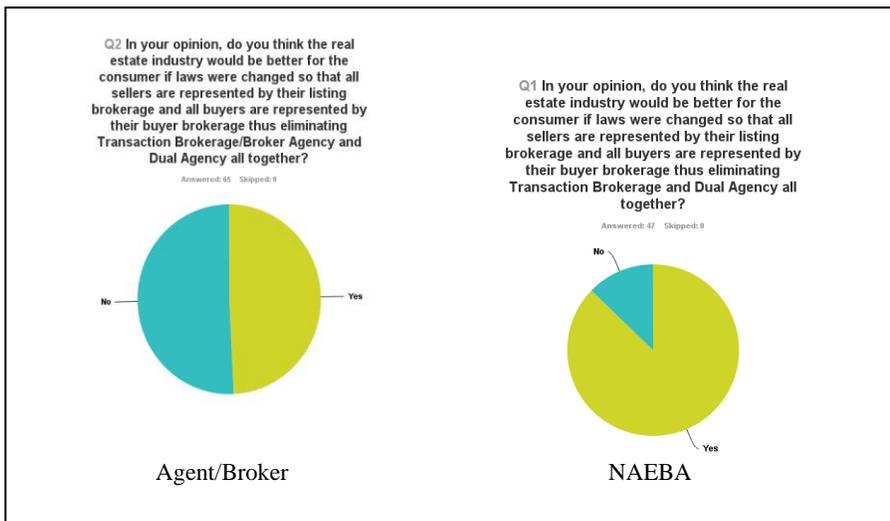


Figure 6. Agent/Broker vs. NAEBA opinion on eliminating Dual Agency and Transaction Brokerage.

Another question that was asked to both agent/brokers and NAEBA members was about the compensation being separated whereas the seller is responsible for their listing side and the buyer responsible for the buyer side. Again, there seems to be confusion and a misunderstanding through the qualitative responses received. Many believe that the seller pays the compensation

when in effect, the compensation is coming out of the transaction at the closing table with both the buyer and seller acknowledging it. Many wrote comments such as “the buyers don’t even have enough money for a down payment, so how would they ever be able to pay” or it would be great but it won’t happen. The graph below shows the comparison for this hypothetical question.

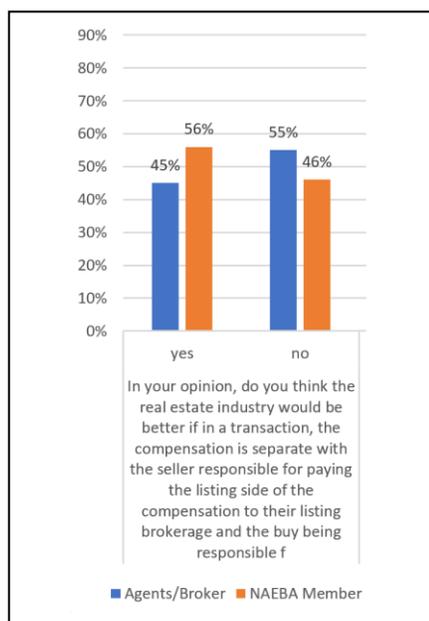


Figure 7. Changing the way compensation is paid in the transaction. This figure shows Agents/Brokers vs. NAEBA members opinion.

On the graph below, the consumer feels strongest that is the commission structure was separated, 56% of consumers still would use a buyer agent.

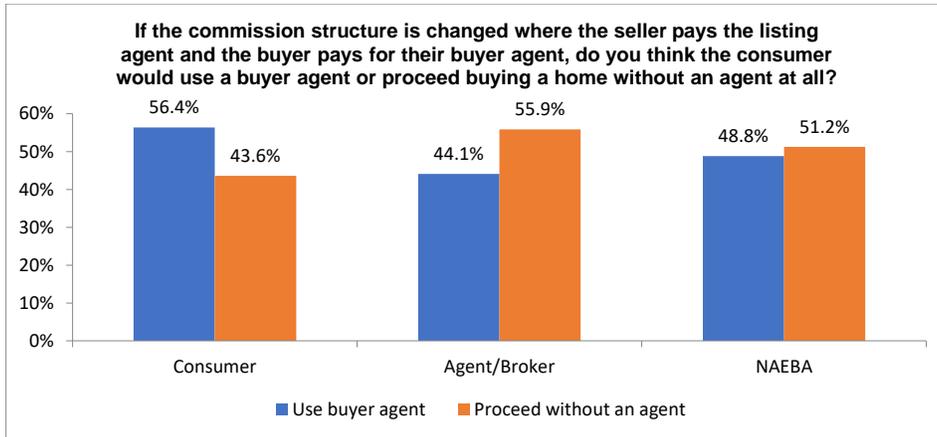


Figure 8. This figure illustrates that consumers' willingness to hire and pay compensation to a buyer agent.

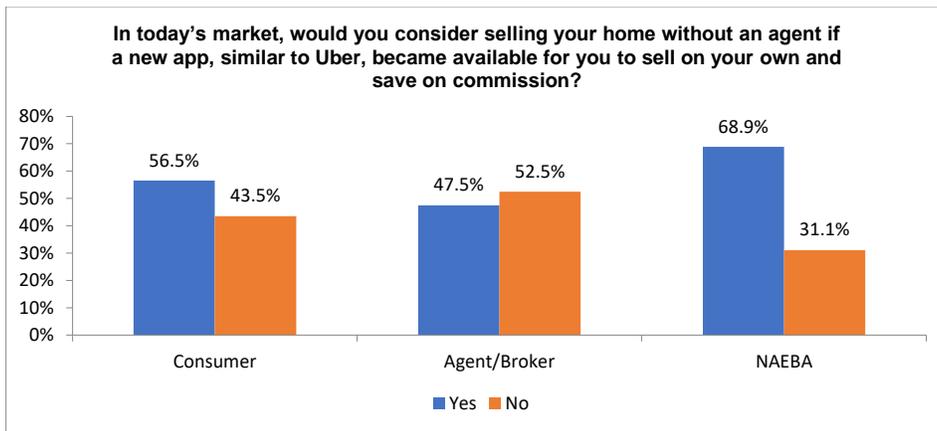


Figure 9. Selling your home in today's market using an app to save on commission.

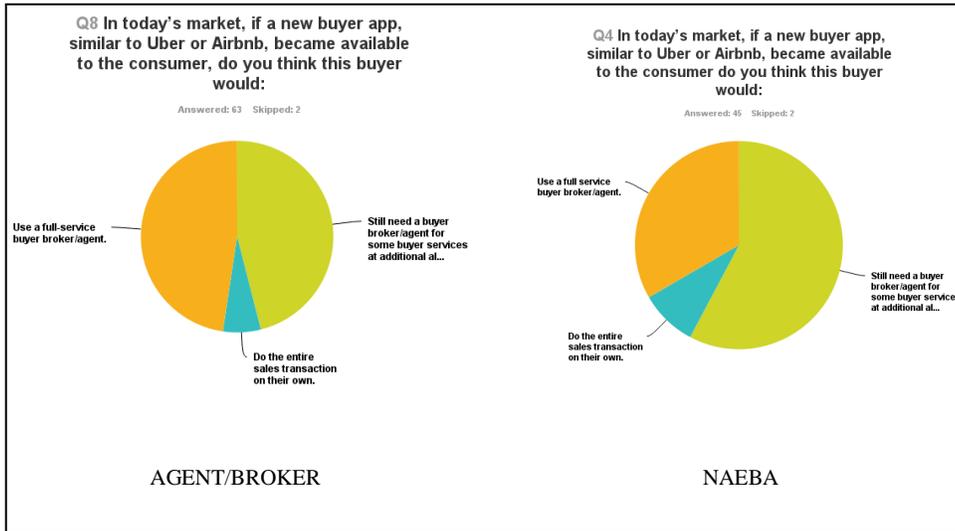


Figure 10. Buying your home TODAY. Agent/Broker vs. NAEBA member perspective on what a consumer would do if a new app became available.

When it comes to buying a home, agents and brokers continue to believe that the consumer wants a full-service agent, whereas the NAEBA agents felt that almost 60% of consumers would be interested in “a la carte” style services. And is there value perceived in using an agent buying a home? The graph below demonstrates that the agent/broker believes they have more value than the consumer feels.

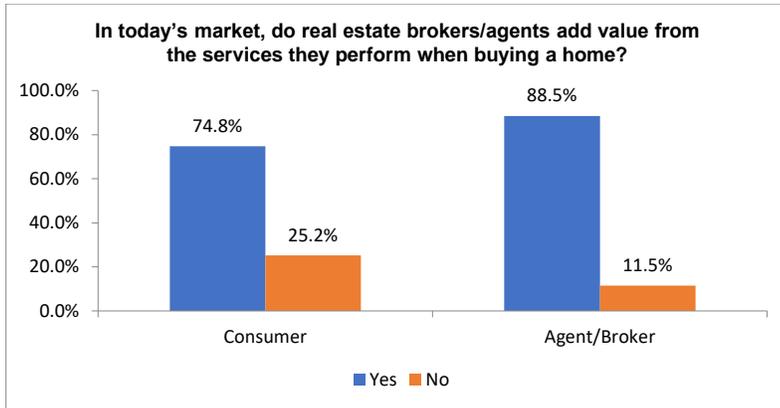


Figure 11. Perceived value of using an agent when buying a home. This figure compares opinion of Consumer vs. Agent/Broker.

There is a strong indication that even as technology advances rapidly, there will be a need for a licensed real estate agent working as a buyer agent to complete the home buying process by both 77% of consumers and agents/brokers. However, if a new buyer app, similar to Uber or Airbnb, became available:

	<u>Agent/Broker</u>	<u>NAEBA</u>
Still need a buyer broker/agent for some buyer services at add'l a la carte fees.	45%	57%
Do the entire sales transaction on their own.	5%	9%
Use a full-service buyer broker/agent.	49%	34%

Figure 12. Responses to scenario: if a new buyer app became available, what do you think the consumer would choose to do?

A la carte buyer services for the FUTURE shows consumer demand. In today's market, 74% of consumers believe that a buyer agent adds value. Survey reveals 89% when the same question was presented to agents/brokers.

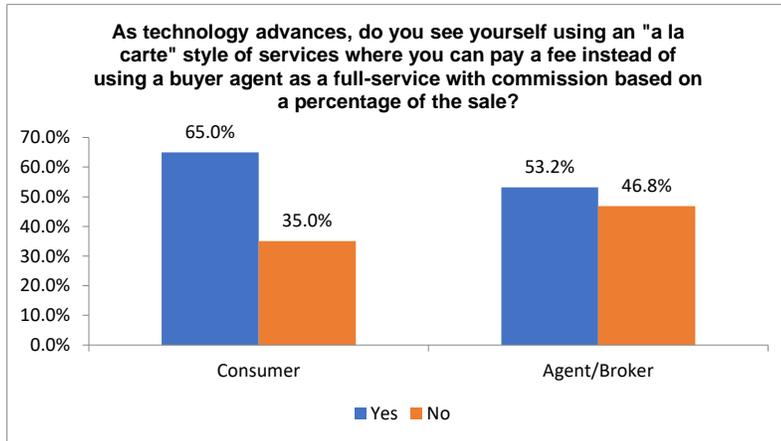


Figure 13. Future demand for "a la carte" style buyer services vs. full service agent.

The comparison chart below shows agent/brokers versus consumer view of the importance of specific benefits when using a buyer agent. The agent and brokers top ranked benefit as fulfilling fiduciary duties yet many states are becoming facilitators or transaction brokers whom represent neither party in the transaction. I am not quite sure that all consumers understand the meaning of the word "fiduciary" as they ranked "always protect your best interest" first and fulfill fiduciary duties fifth. There is still confusion surrounding legal agency concepts. How can an agent/broker try to represent both the buyer and the seller in either dual agency or designated agency or an agent/broker that represents neither party in a transaction truly provide undivided loyalty or full disclosure to either party?

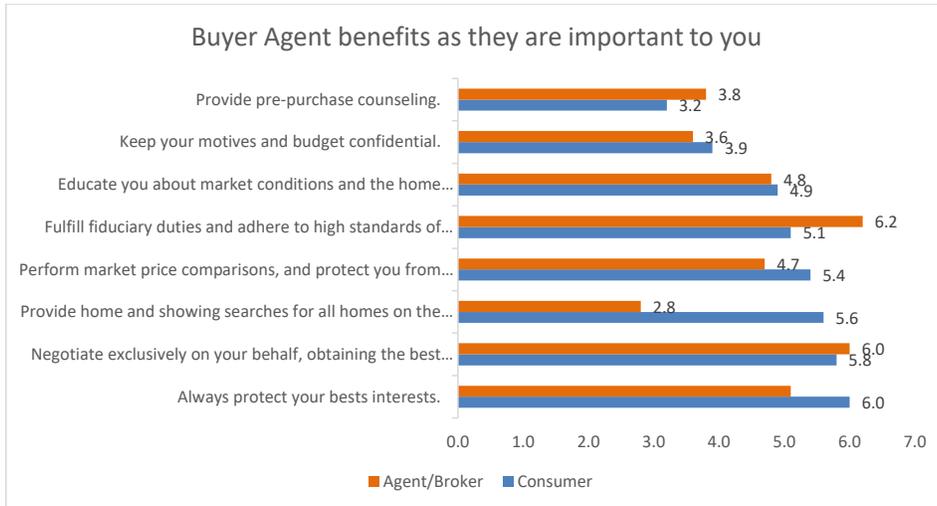


Figure 14. Buyer Agent benefits as they are important to you as Consumer vs. Agent/Broker.

To further probe and admit beneficial “a la carte” buyer agent services, survey Question #5 on NAEBA and #9 on Agent/Broker survey, showed that both agents/brokers and NAEBA members consistently named the top five services as most chosen in the following order. #1 is negotiating on behalf of the buyer, #2 perform a market analysis, #3 write contracts, #4 carry out transaction coordination, and #5 home search and showings. Other suggested services to be noted with less frequency was educating the consumer, representation, recommending other service providers such as home inspectors, title company, and school reports. Although the consumer wants their interest protected and fulfilled fiduciary duties, agents not working as a single agent offering these services can prove to be misleading and conceivably fraudulent under the state law. Below is a graph of the consumer opinion of buyer agent benefits.

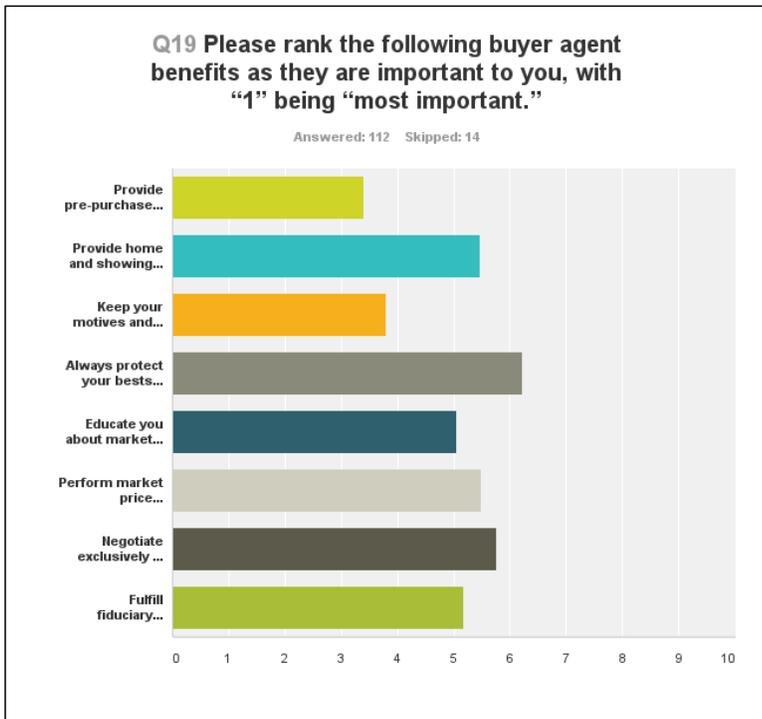


Figure 15. Buyer agent benefits ranked by consumer importance.

The surveys also evaluated data regarding listing residential properties in today's market as well as the future. Consumer Question #10 shows that 55% of potential sellers would consider selling their home on their own if today a new app came on the market that could save them on commission. The graphs below show variance in opinion on the future role of listing agents.

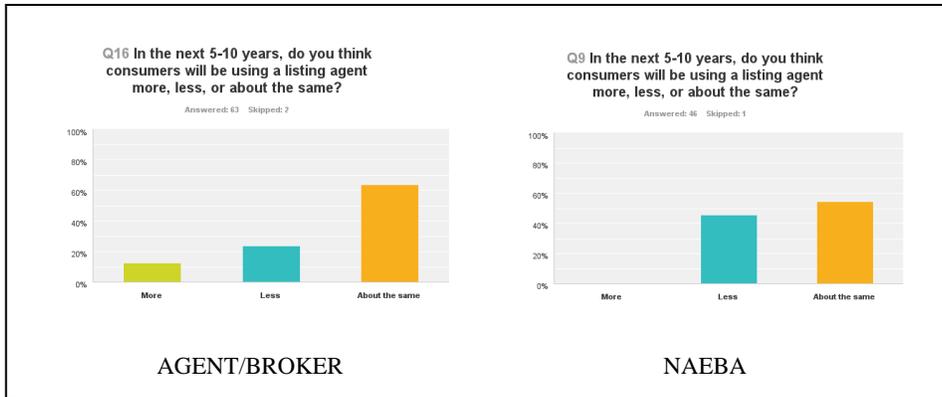


Figure 16. Future of Listing Agents.

There is suggested optimism from agents and broker that there will be a future need for them. The chart below was coded through Consumer Question #12, Agent/Broker Question #6, and NAEBA member Question #7.

Consumer	Agent/Broker	NAEBA
1 Marketing (photos, staging, advertising)	1	4
2 Schedule Showing Appointments & Secure Home Access on Showings	5	6
3 List on MLS	2	2
4 Handle the negotiation on offers	4	3
5 Run Open House	6	7
6 Prepare Paperwork & Contracts	3	5
7 Help with Proper Permits from Town	*	*

* No comments from agents/brokers or NAEBA members regarding legal issues, co's/permit help.

Figure 17. The most important “a la carte” listing services. This figure illustrates a comparison of Consumer vs. Agent/Broker vs. NAEBA member.

In the next 5-10 years, will listing agents and buyer agents become extinct? Agents/Brokers and NAEBA members again show optimistic results. Comments leading toward extinction include “if the MLS would open to FSBO’s or Zillow becomes the default national MLS for licensees, builders, and FSBO’s”, “computer apps will take over the role of the agent”, “technology will increase the number of FSBO’s”. On the other hand, respondents also voiced opinions such as “People for centuries have been buying and selling on their own. There have been many web pages, apps, etc. that allow FSBO’s, but many still find it safer and easier to use an agent” or “real estate sales are a complex transaction with many regulations and pitfalls. Buyer beware. You need an agent familiar with the many issues that arise during the transaction. If the consumer tries to do it on their own, many will be harmed in the process” or “Listing agents are still needed for their advice and counsel, but not to the degree a buyer needs”.

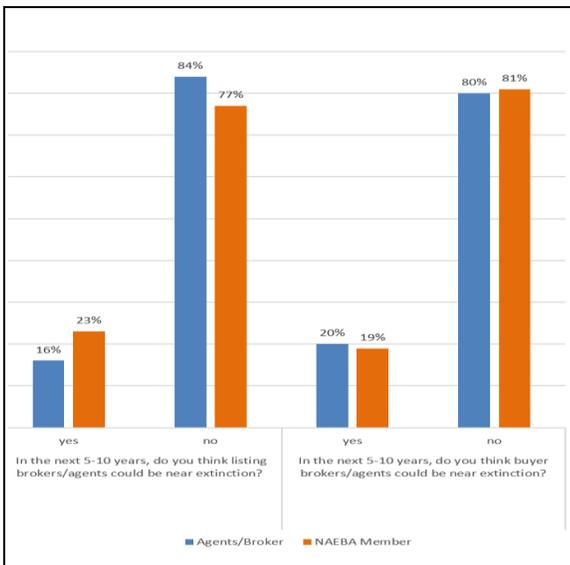


Figure 18. Future extinction of real estate agents.

NAEBA members believe that new, technology-based real estate business models will surpass the traditional brokerages in the following categories below.

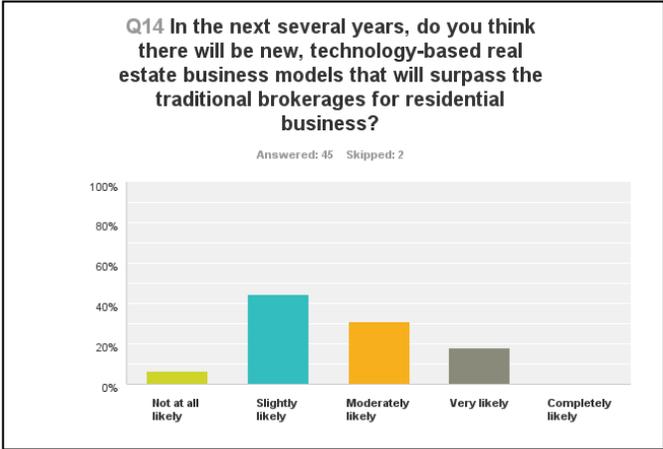


Figure 19. NAEBA members view of new, technology based real estate business models.

The most significant discrepancy on foresights remains on the next graph comparing Consumer Question #22, Agent/Broker Question #17, and NAEBA Question #10.

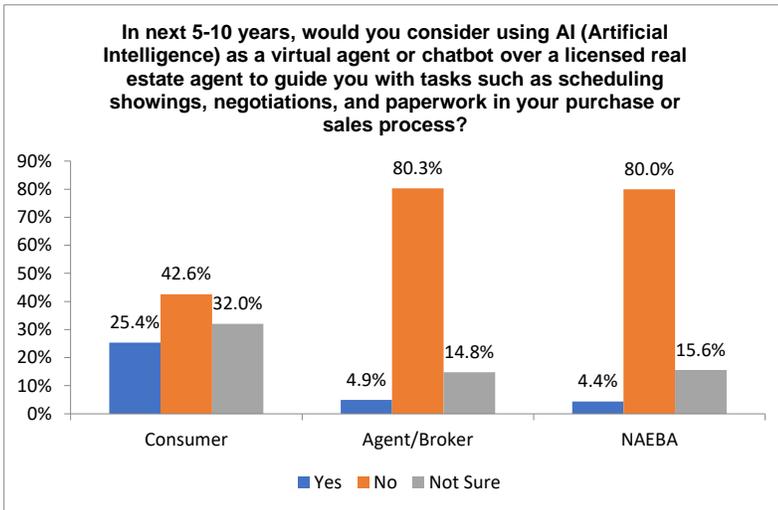


Figure 20. The future of artificial intelligence agent vs. human real estate agent.

Agents/brokers and NAEBA members are 80% confident that technology won't take over their role in the real estate transaction contrasted with 40% of consumers. 25% of consumers do believe the agents role will be taken over in the next 5-10 years where as agents/brokers and NAEBA member are slightly under 5%.

Chapter 4 Conclusion

Though debatable among the professionals in the real estate industry, technology will convey changes to real estate law, practices, and services over the next five to ten years. Entrepreneurial awareness has been stirred by the swift growth of companies such as Uber and Airbnb. Reproduction of similar style apps in services such as home care, medicine, elderly care, real estate, security, hospitality, logistics, et cetera will “uberize” the economy around the globe theoretically metamorphizing how local services are fulfilled and how consumers are satisfied (Gapinski, 2016). Education through technology will fuel the consumers need to distinguish what they are paying for in the real estate transaction and why. “Ethical Walls” may crumble as consumers petition for “CARLOAD”; Confidentiality, Accountability, Reasonable Skill and Care, (Undivided) Loyalty, Obedience (to Lawful Instruction), Advocacy, and (Full) Disclosure when paying for real estate services whether buying or selling. The NAR and other large real estate firms argue that in the future *Robots Can't Replace Realtors*® because technology “will never supply the human factor consumers need in the transaction” (Kuo, 2016). The survey showed heightened optimism in the broker and agents opinion of how much they are needed in the industry. However, sites such as Zillow are making it easy for the consumer to have the on-demand ability to list without an agent and be seen possibly more than the local MLS (Bianco, 2015). Real estate apps and sites designed in a quasi-FSBO format will entice consumers likely to use a peer-to-peer marketplace and save on commissions. Thus, the broker’s role may still remain intact for listing services, but the number of agents within the firm may dwindle due to technology lessening the need for agent related listing services. The survey indicates that the necessity of a buyer agent throughout the process may continue, but some consumers will still be inclined to choosing specific “a la carte” services. The survey results of this thesis anticipate that

the consumer will be in control of the design path of real estate related technologies. Consumers in all respondent age groups embrace technology and are quickly adapting to change. For some consumers, there will always be a need for the traditional, full service real estate firm. However, specialty, boutique, and “a la carte” service agencies may dominate future markets leading to an overhaul of the compensation structure throughout the industry. Real estate agents will lose value as digital peer-to-peer exchange platforms couple exponentially with technological advancements.

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[=true&db=plh&AN=SYD-6RAQLZH7XE818FTEJ53C&site=ehost-live&scope=site](http://search.ebscohost.com/login.aspx?direct=true&db=plh&AN=SYD-6RAQLZH7XE818FTEJ53C&site=ehost-live&scope=site)

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[alert-startup-delivers-real-estate-brokerage-for-1-commission](http://www.housingwire.com/articles/print/31501-agent-alert-startup-delivers-real-estate-brokerage-for-1-commission)

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Appendix A: US Agency Disclosure References for Table 1

State	
Alabama	https://arec.alabama.gov/AREC_Bookmark/ViewLaw.aspx?LawSectionID=103
Alaska	https://www.commerce.alaska.gov/web/portals/5/pub/rec4145.pdf
Arizona	https://www.aaronline.com/wp-content/uploads/2013/01/real-estate-agency-disclosure-and-election.pdf
Arkansas	http://www.arec.arkansas.gov/forms/Documents/Agency%20Rep%2012%2015%202014.pdf
California	http://www.cdmproperties.net/forms/listing-forms.pdf
Colorado	https://drive.google.com/file/d/0B1VD36mBqe1EVmVGeVM2a0M4enc/view
Connecticut	http://www.ct.gov/dcp/lib/dcp/pdf/realestate_licensing_forms/policy.pdf
Delaware	http://www.dpr.delaware.gov/boards/realestate/documents/CIS-Residential%201-4%20Families.pdf
Florida	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0475/Sections/0475.278.html
Georgia	http://coachbunch.com/wp-content/uploads/2017/01/2017-ABCs-of-Agency-Representation.pdf
Hawaii	http://hawaiirealestateteam.com/fsbo-guide/agency/
Idaho	https://irec.idaho.gov/publcs/agency-disclosure-brochure.pdf
Illinois	http://www.illinoisrealtor.org/sites/illinoisrealtor.org/files/Forms_2016/Consumers%20Guide%20to%20Real%20Estate%20Agency%20in%20Illinois.pdf
Indiana	Could not find documentation
Iowa	http://www.mlsyourway.com/forms/agencydisclosureIA.pdf
Kansas	https://www.krec.ks.gov/legal-resources/brreta
Kentucky	http://krec.ky.gov/legal/Documents/What%20You%20Need%20To%20Know%20About%20Buying%20and%20Selling%20a%20Home.pdf
Louisiana	https://www.lrec.state.la.us/files/AgencyDisclosureform.pdf
Maine	https://www1.maine.gov/pfr/professionallicensing/professions/real_estate/pdf/RECform3.pdf

Maryland	https://www.dlir.state.md.us/forms/mrecrearep.pdf
Massachusetts	http://www.mass.gov/ocabr/docs/dpl/boards/re/disclosure-form-agency-non-agency.pdf
Michigan	http://www.legislature.mi.gov/(S(1lhaqx3id01cr2wfx2a0s0ky))/mileg.aspx?page=GetObject&objectname=mcl-339-2517
Minnesota	https://www.revisor.mn.gov/statutes/?id=82.67
Mississippi	http://www.mrec.ms.gov/docs/mrec_forms_working_with_a_real_estate_broker.pdf
Missouri	https://law.missouri.edu/freyermuth/ret/fall2016/Mo%20Brokerage%20Disclosure%20form.pdf
Montana	https://www.montanarealtors.org/faq/agency/
Nebraska	http://nrec.ne.gov
Nevada	http://red.nv.gov/uploadedFiles/rednvgov/Content/Forms/622.pdf
New Hampshire	http://thackston.com/buyers-sellers/types-of-agency-representation/
New Jersey	http://www.greatercoastal.com/Greater_Costal_Realty/DOWNLOADS/Consumer_Information_Statement.pdf
New Mexico	http://riverwalkrealtynm.com/uploads/3/2/5/5/3255683/broker_duties.pdf
New York	https://www.dos.ny.gov/forms/licensing/1736-a.pdf
North Carolina	http://www.ncrec.gov/Brochures/WorkingwAgents.pdf
North Dakota	http://locatehome.com/wp-content/uploads/2013/11/Agency-Relationships-Disclosure-ND-1-2015.pdf
Ohio	http://ohiorealtors.org/legal/agency-law-resources/consumer-guide-to-agency-relationships/
Oklahoma	https://www.ok.gov/OREC/documents/Disclosure%20of%20Brokerage%20Service%20%2811-2013%29.pdf
Oregon	https://www.oregon.gov/rea/licensing/Documents/Sample_Initial_Agency_Disclosure_Pamphlet.pdf
Pennsylvania	http://www.momboard.com/forms/Discl_Re_Agency_Relationships.pdf

Rhode Island	http://www.riliving.com/CustomSites/Agents/salisburyagency/MandatoryRelationshipDisclosure.pdf
South Carolina	http://www.charlestonrealestateguide.com/agency-disclosure.pdf
South Dakota	http://spearfishrealty.com/wp-content/uploads/2013/11/Real-Estate-Relationship-Disclosure.pdf
Tennessee	https://maar.org/questionstoask
Texas	https://www.trec.texas.gov/sites/default/files/pdf-forms/IABS%201-0.pdf
Utah	http://interwestrealtybrokers.com/SellerForms/AGENCY_DISCLOSURE_SELLER.pdf
Vermont	https://lakechamplainrealestate.com/sellers/understanding-your-vermont-real-estate-agency/
Virginia	http://www.varealtor.com/sites/varealtor2.com/files/Agency%20Disc%20Forms%20Broker%20Guide%20.pdf
Washington	http://app.leg.wa.gov/rcw/default.aspx?cite=18.86.120
Washington DC	https://www.asisvcs.com/publications/pdf/660909.pdf
West Virginia	http://rec.wv.gov/Forms/Documents/Notice%20of%20Agency%20Relationship.pdf
Wisconsin	http://www.megal.com/pdf/DisclosureofRealEstateAgency.pdf
Wyoming	http://www.burnettfarmandranch.com/myphotos/Blank%20Brokerage%20disclosure%20for%20website.pdf

Appendix B: Consumer Survey

1. Do you think most brokers/agents care more about making commissions than your interest in buying or selling?

- Yes
- No

2. When you buy or sell a home, do you think the agent is representing your best interests in the transaction?

- Yes
- No
- Don't know

3. Do you know what a buyer's agent is?

- Yes
- No

4. Do you know what dual agency is?

- Yes
- No

5. Do you know what fiduciary duty means?

- Yes
- No

6. Have you ever used any of these services: Uber, Lyft, Ebay, Airbnb, TD Ameritrade, Scott Trade?

- Yes
- No

7. Do you watch real estate related programs such as House Hunters, Fixer Upper, Flip or Flop, Property Brothers, Etc.?

- Yes
- No

8. Please rank your top 5 websites for real estate, with "1" being "most important to you."

homes.com

trulia.com

your local MLS.com

streeteasy.com

zillow.com

forsalebyowner.com

redfin.com

realtor.com

remax.com

hubzu.com

fizber.com

hotpads.com

Other: _____

9. Questions 9-15 refer to your opinion if you were hypothetically going to sell your home. In today's market, do real estate brokers/agents add value from the services they perform when listing your home?

Yes

No

10. In today's market, would you consider selling your home without an agent if a new app, similar to Uber, became available for you to sell on your own and save on commission?

Yes

No

11. In today's market, would you (A) still need a real estate broker/agent for some seller services at a la carte fees or would you (B) do the entire sales transaction on your own?

A

B

12. Name two a la carte listing service from a broker/agent that you think might be important for you to pay for.

13. With today's smart technologies, would you, as the homeowner, allow buyers with their agent see your home when you are not home via the use of a lockbox or e-key?

Yes

No

14. Would you, as the homeowner, feel confident negotiating and accepting an offer on your home without using a listing agent?

Yes

No

15. Do you believe that using a licensed real estate broker/agent will sell your home faster or for a higher dollar amount?

- Yes
- No

16. Questions 16- 26 refer to your opinion if you were hypothetically going to buy a home. In today's market, do real estate brokers/agents add value from the services they perform when buying a home?

- Yes
- No

17. In today's market, would you consider buying your home without a licensed broker/agent if a new app, similar to Uber or Airbnb, was available for you that made it an easier process?

- Yes
- No

18. In today's market, would you (A) still need a real estate broker/agent for some buyer services at additional al carte fees or would you (B) do the entire sales transaction on your own?

- A
- B

19. Please rank the following buyer agent benefits as they are important to you, with "1" being "most important."

Provide pre-purchase counseling.

Provide home and showing searches for all homes on the market, not just the MLS.

Keep your motives and budget confidential.

Always protect your bests interests.

Educate you about market conditions and the home buying process.

Perform market price comparisons, and protect you from over-paying for a home.

Negotiate exclusively on your behalf, obtaining the best price and terms for the buyer.

Fulfill fiduciary duties and adhere to high standards of ethics and integrity.

20. If you had an app with artificial intelligence as a virtual agent to help you throughout your transaction, would you, as the buyer, feel confident looking at homes, negotiating, and closing on the home without a human agent being present?

- Yes
- No

21. Even as technology advances rapidly, do you believe there will always be the need for a licensed human real estate broker/agent to work as a buyer agent for the complete home buying process?

- Yes
- No

22. Would you consider using AI (Artificial Intelligence) as a virtual agent or chatbot over a licensed real estate agent to guide you with tasks such as scheduling showings, negotiations, and paperwork in your purchase or sales process?

- Yes
- No
- Not Sure

23. Who would you trust more in assisting you in your sale or purchase?

- Artificial Intelligence as your virtual agent
- Your licensed real estate broker/agent

24. As technology advances, do you see yourself using an a la carte style of services where you can pay a fee instead of using a buyer agent as a full-service with commission based on a percentage of the sale?

- Yes
- No

25. With today's websites filled with photos, virtual tours, and now virtual reality, would you consider buying a home without ever seeing it in person?

- Yes
- No
- Maybe

26. If the real estate industry changed the way commissions are currently structured and now the seller would be responsible for paying the listing broker's commission and the buyer would be responsible for paying the buyer broker's commission, would you use a buyer agent or proceed buying a home without an agent?

- Use buyer agent
- Proceed without an agent

27. What age group are you?

- 18 -21
- 22-40
- 41-52
- 53-71
- 72 or above

28. Where do you currently live?

- City
- Suburb
- Rural Area

Done

Appendix C: Agent or Broker Survey

1. Do you think your state's agency disclosure form is easy for everyone, including yourself, to understand?

- Yes
- No

2. In your opinion, do you think the real estate industry would be better for the consumer if laws were changed so that all sellers are represented by their listing brokerage and all buyers are represented by their buyer brokerage thus eliminating Transaction Brokerage/Broker Agency and Dual Agency all together?

- Yes
- No

3. In your opinion, do you think the real estate industry would be better if in a transaction, the compensation is separate with the seller responsible for paying the listing side of the compensation to their listing brokerage and the buyer being responsible for paying for services rendered from their buyer brokerage?

- Yes
- No
- Comments:

4. In today's market, do you think more consumers would consider selling their home without an agent if a new app, similar to Uber, become available for you to sell on your own and save on commission?

- Yes
- No

5. In today's market, do you think consumers would consider unbundled real estate services sold a la carte?

- Yes
- No

6. Name two a la carte listing services that you think a consumer would find important to use.

7. In today's market, do buyer brokers/agents add value from the services they perform while working with a buyer?

- Yes
- No

8. In today's market, if a new buyer app, similar to Uber or Airbnb, became available to the consumer, do you think this buyer would:

- Still need a buyer broker/agent for some buyer services at additional a la carte fees.
- Do the entire sales transaction on their own.

Use a full-service buyer broker/agent.

9. Name two a la carte buyer services that you think a consumer would find important to use.

10. With today's websites filled with photos, virtual tours, and now virtual reality, did you ever have a buyer purchase a home without ever seeing it in person?

Yes

No

11. Please rank the following buyer agent benefits as they are important to you, with "1" being "most important."

Provide pre-purchase counseling.

Provide home and showing searches for all homes on the market, not just the MLS.

Keep your motives and budget confidential.

Always protect your best interests.

Educate you about market conditions and the home buying process.

Perform market price comparisons, and protect you from over-paying for a home.

Negotiate exclusively on your behalf, obtaining the best price and terms for the buyer.

Fulfill fiduciary duties and adhere to high standards of ethics and integrity.

12. Keep in mind the future advancements in technology for the following questions below. As technology advances in the next 5-10 years, do you believe there will always be the need for a licensed real estate agent to work as a buyer agent for the complete home buying process?

- Yes
- No
- Not Sure

13. As technology advances, do you see yourself being a broker/agent with an a la carte set of services that a consumer can pay a fee for instead of using a full-service broker/agent with commission based on a percentage of the sale?

- Yes
- No

14. If the real estate industry changed the way commissions are currently structured and now the seller would be responsible for paying the listing broker's commission and the buyer would be responsible for paying the buyer broker's commission, do you think the consumer would use a buyer agent or proceed buying a home without an agent?

- Use buyer agent
- Proceed without an agent

15. In the next 5-10 years, do you think the residential real estate industry will be based on signing more listing agreements or buyer agency agreements?

- Listings
- Buyer

16. In the next 5-10 years, do you think consumers will be using a listing agent more, less, or about the same?

- More
- Less
- About the same

17. In the next 5-10 years, do you think AI (Artificial Intelligence) as a virtual agent or chatbot can take over the job of a licensed real estate agent from start to close on a sale?

- Yes
- No
- Maybe

18. As technology advances, who will consumers trust more in their sale or purchase?

- Artificial Intelligence as your personal virtual agent.
- Your licensed real estate broker/agent.

19. In the next 5-10 years, do you think listing brokers/agents could be near extinction?

- Yes
- No
- Why?

20. In the next 5-10 years, do you think buyer agents could be near extinction?

- Yes
- No
- Why?

21. What state are you licensed in?

22. In your current practice, what percentage of buyers and sellers do you work with?

_____ % Buyers

_____ % Sellers

=100%

23. In your current real estate practice, fill in the percentage of each type of agency you perform in your normal course of business.

Represent sellers _____ %

Represent buyers _____ %

Transaction Broker or Broker Agent with buyers and sellers _____ %

Dual Agency (if legal in your state) _____ %

Dual Agency with a Designated Agent _____ %

DONE

Appendix D: NAEBA Member Survey

1. In your opinion, do you think the real estate industry would be better for the consumer if laws were changed so that all sellers are represented by their listing brokerage and all buyers are represented by their buyer brokerage thus eliminating Transaction Brokerage and Dual Agency all together?

- Yes
- No

2. In your opinion, do you think the real estate industry would benefit in a transaction, if the compensation is separated, whereas the seller is responsible for paying the listing side of the compensation to their listing brokerage and the buyer is responsible for paying for services rendered from their buyer brokerage?

- Yes
- No
- Comments:

3. If the commission structure is changed as in question 2, do you think the consumer would use a buyer agent or proceed buying a home without an agent at all?

- Use buyer agent
- Proceed without an agent

4. In today's market, if a new buyer app, similar to Uber or Airbnb, became available to the consumer do you think this buyer would:

- Still need a buyer broker/agent for some buyer services at additional a la carte fees.
- Do the entire sales transaction on their own.
- Use a full-service buyer broker/agent.

5. Name two a la carte buyer services that you think a consumer would find important to use.

6. In today's market, do you think more consumers would consider selling their home without an agent if a new app, similar to Uber, become available for you to sell on your own and save on commission?

- Yes
- No

7. Name two a la carte listing services that you think a consumer would find important to use.

8. As technology advances, do you see yourself being a broker/agent with an a la carte set of services that a consumer can pay a fee for instead of using a full-service broker/agent with commission based on a percentage of the sale?

- Yes
- No

9. In the next 5-10 years, do you think consumers will be using a listing agent more, less, or about the same?

- More

- Less
- About the same

10. In the next 5-10 years, do you think AI (Artificial Intelligence) as a virtual agent or chatbot can take over the job of a licensed real estate agent from start to close on a sale?

- Yes
- No
- Maybe

11. In the next 5-10 years, do you think listing brokers/agents could be near extinction?

- Yes
- No
- Why?

12. In the next 5-10 years, do you think EBA's and buyer agents could be near extinction?

- Yes
- No
- Why?

13. As technology advances, who will consumers trust more in their sale or purchase?

- Artificial Intelligence as your personal virtual agent.
- Your licensed real estate broker/agent.

14. In the next several years, do you think there will be new, technology-based real estate business models that will surpass the traditional brokerages for residential business?

- Not at all likely
- Slightly likely
- Moderately likely
- Very likely
- Completely likely

15. What state are you licensed in? (2 Letter Abr.)

Done

