REAL ESTATE 2.0: TOWARDS A VALUE ECOLOGY?[1]

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In the Web 2.0 communication and cultural environment, the way in which value is created is shifting from a hierarchical model, in which products are created, managed and distributed from the top down (with customers on the bottom), to a horizontal or peer-to-peer model, in which customers generate, distribute and reconfigure content in extensible systems managed by the platform provider. Economics researchers argue that we are in fact now entering a 'social network economy' in which 'complex social networks play at least as significant a coordination role as price signals' in consumer choice (Hartley et al. 2008, 169). That is, externalities such as consumers' involvement in social networks, and those networks' word of mouth recommendations, as well as organisations' ability to engage with and enable the activities of active and dynamic networks, are becoming ever more central to organisations' success, and to their value. In the past, 'the dominant logic focused on tangible resources, embedded value, and transactions. Over the past decades, new perspectives have emerged that have a revised logic focused on intangible resources, the co-creation of value, and relationships' (Vargo and Lusch 2004, 1). In the light of this, many organisations are shifting from thinking and communicating in the conventional 'value chain' model of communication, in which exchanges between firms and customers are one-way only — from the firm to the consumer — to the 'value ecology' model, in which consumers and their networks become active co-creators of the value of the product (Hearn & Pace 2006).[2] For commercial and non-commercial organisations alike, communication and value-generation in the 'value ecology' model entails a shift away from simply pushing content at customers or end users to a more dynamic engagement with and in active communities of participants. In this latter model, communication flows in multiple directions: from the organisation to participants, but also from participants to the organisation, and, most importantly, between participants themselves. Industries and organisations most likely to benefit from making this shift include those which can draw on existing interest- or product-based communities; and those which understand the dynamics of online networks, and how to manage them while facilitating user innovations and contributions (Bruns & Bahnisch 2009, 6). Drawing on the economic theory of 'value ecology', as well as on Herz's characterisation of user-generated content online communities as 'constructive ecologies' (2005, 334), this paper refers to this type of communication and value-creation model as 'ecology engagement'.[3]

The real estate industry in Australia is massive, both economically and culturally. Economically, the real estate industry is worth billions; it also represents a significant cohort of employees who rely on the industry's health. In 2003, there were just over 10,000 real estate organisations active in Australia, employing 76,599 people (ABS 2004). While sale and rental of tangible property is at the core of real estate business, real estate is also a business based heavily on trading in intangible values, such as the 'feel' of a neighbourhood or a property, or the reputation of a real estate company or agent. Communication between real estate organisations and clients and potential

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[1]   This work was supported by the Smart Services CRC.
[2]   Other terms used to describe the 'value ecology' model include 'value circuit' (Jeffcutt 2004), 'value network' (Stabell and Fjeldstad 1998), and 'value soup' (Lorenzen and Frederiksen 2003).
[3]   There are numerous other terms in circulation which refer broadly to this model of communication or interaction, including 'commons-based peer production' (Benkler 2006), 'produsage' (Bruns 2008), and 'P2P production' (Bauwens 2007). 'Ecology engagement' is used here because it refers specifically to organisations' communication practices and platforms, rather than to the broader 2.0 suite of practices.

clients — and the organisations' positive engagement with the community — is thus of key importance. Real estate firms have long recognised the imperative of communicating online; the first phase of this practice saw most real estate organisations shifting their previously print-only listings online. But this did not represent a shift in value models or communication approaches, rather, it represented the simple transposition of the value chain model of communication and value onto a new medium. More recently, through the development of new communication tools and applications, some organisations within the real estate industry have started to shift from a 'value chain' model to an ecology engagement one. Taking the massive real estate industry as a case study of this shift, this paper anatomises key real estate communication innovations, observing not only which innovations have succeeded, but also identifying points at which the shift from 'chain' to 'ecology' practices has failed to occur. The case study findings may not be applicable across the entire economy; they provide a useful snapshot of how theories of 'ecology engagement' are playing out in one industry. The paper focuses on specific real estate communication and engagement applications, including real estate social media, online real estate games, real estate online mapping, real estate locative media, and real estate augmented reality. As such, the paper is a study of the commercial-sector application of the concept of 'value ecology' and its associated digital communication and engagement practices.

The opportunities for real estate organisations in shifting to a value ecology approach are significant. Real estate, as we have indicated, is a massive market, and one in which most Australians are in some way involved. Whether it is as house-hunters, property investors, property owners, renters, developers, or real estate market enthusiasts, the majority of Australians engage in some way with real estate. Real estate is not limited as a topic of concern to those involved in property transactions: popular TV shows such as *Hot Property* (1999–) and *The Block* (2003, 2004, 2010), for example, signal Australians' broader cultural engagement with real estate discussion and engagement. As Lorenzo-Dus observes, the cultural engagement with real estate, as exemplified through such real estate reality TV programs, is a key component of people's identity construction, communication, and negotiation (2006). For real estate organisations, then, the task is not to try to create a community of interest around real estate — to generate an 'ecology' — but rather to engage productively with — and to leverage — an extant and highly active one. Real estate organisations' core asset used to be information — house prices, listing addresses, and so on (Tuccillo 2002, 32) — but with information becoming increasingly ubiquitous and easy for users to discover on their own, real estate organisations must recalibrate their focus by shifting away from information provision as one of their core means of creating value towards enabling and leveraging the wealth of information and energy found within the existing ecology of the enormous community of people with an interest in real estate.

Real estate social media

One need only look at the profound success of *Facebook*, with its 500 million plus subscribers, to know that customers are ready to build relationships, and share insights. In terms of social media, Australia's remarkable adoption rate is now well established, with Forrester Research's 2008 finding that two thirds of Australian adults are engaged in social media sites (Noble 2008), and technology analysts Nielson reporting that Australia leads the world in terms of average time spent on social sites per person per month: seven hours (NielsenWire 2010).

Given users' widespread engagement with social media, the marriage between existing real estate social communities (or ecology), and industry-specific social networking applications would appear to be a natural one. By 'social networking' we take up Bruns and Bahnisch's definition in this paper: 'websites which build on Web 2.0 technologies to provide space for in-depth social interaction, community formation, and the tackling of community projects' (2009, 5). Property purchases and sales are by their very nature social purchases, often with relatives and friends getting involved; they may have valuable sales experiences of their own, or acumen regarding the locality

that can be added to the data stream provided by agents, property journalists, and industry analysts such as Australian Property Monitors.

One web-based service that utilises social media tools is the US-based *BiggerPockets.com* (launched 2008). Referring to itself as a 'real estate social networking site' and a 'community', its focus is on networking, deal-making, and education. The 57,000-member site[4] enables its users to join discussion forums, read articles, and market their real estate businesses. *BiggerPockets* employs an ecology engagement approach to its communication and to its value: the site is not simply a way for the organisation to push content to its members; rather, it is a platform through which users connect with each other, and to which they add their own content. *BiggerPockets*, it should be noted, is not a real estate company itself; it is a third-party real estate publishing firm. It is currently restricted to North American markets.

Despite the existence of sites such as *BiggerPockets*, few Australian real estate organisations' sites actively acknowledge the informal networks of friends and families in what might be referred to as the 'real estate community', let alone provide online tools to better enable and engage in the conversations that naturally occur between them. As the following details, this extant 'ecology' is as yet largely ignored by Australian real estate organisations.

In a national environmental scan, six prominent Australian real estate agencies were assessed for their use of ecology engagement tools and practices: Nelson Alexander (Melbourne's largest privately owned real estate company), Hocking Stuart (41 offices throughout metropolitan Melbourne and regional Victoria), Richardson and Wrench (90 offices throughout metropolitan Sydney), Jellis Craig (specialists in Melbourne's inner east), McGrath Estate Agents (specialising in high-end Sydney property) and Toop & Toop (South Australia's largest private residential agency).

Of these, McGrath's and Toop & Toop stand out as the most innovative in its communication practices. McGrath's founder John McGrath has a topical blog and regularly presents a vodcast dealing with industry trends and insights.

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4   http://www.biggerpockets.com/stats.

Figure 1: John McGrath

Source: <http://www.johnmcgrathblog.com.au/>

Toop & Toop's blog 'Inside Story', using Google's *Blogger* platform, features the social media plug-ins Google Friends and Facebook Connect. The company embeds its current property videos on its Toop TV *Facebook* profile. It also runs *Toop TV* (http//:www.toop.tv), a live, interactive (viewers can submit questions in real time) video channel, hosted by its managing director, Anthony Toop, who is also the public face of the company blog. Like McGrath's programs, *Toop TV* features interviews with state government and council policy makers and canvasses market trends and vendor/buyer pointers.

Figure 2: *Toop TV* on Facebook

Source: <http://www.facebook.com/pages/ToopTV/204571514633>

Toop &Toop's web presence, beyond its dedicated home site, along with its use of rich media, place it at the Australian industry's innovative edge. Yet its communication remains largely locked in the 'value chain' model: the communication may be rich, but it still travels only one way, from Toop & Toop to readers. Discussion and user contributions, for example, are not enabled on its Facebook profile. As such, even Toop & Toop's media-rich communication practices, which include the use of Facebook, become one of what Bruns and Bahnisch categorise as communication which does not quite meet the definition of 'social media', that is: 'websites which build on Web 2.0 technologies but do so without making specific efforts to enable user communities to form and organise themselves. Such Websites include, for example, the many travel and product review sites which offer an option to add content, but fail to leverage the knowledge of existing communities, as well as many news media Websites which provide the functionality to add comments to news articles,

but offer no space for meaningful longer-term interaction amongst authors and commenters' (2009, 3).

Unlike Toop & Toop and McGrath, the 152-year-old firm Richardson and Wrench eschews Web 2.0 altogether. It has a 'Connect' web page but this has nothing to do with establishing with peer-to-peer connections within an online network, as the term in its 2.0 context connotes. Rather, 'Connect' is a service that gets household utilities such as phone, gas, and electricity up and running. In another terminological twist, the word 'community' when used in its 2.0 sense, refers to a social network, or an online community of users with shared interests, whereas clicking on the 'Community' tab of the Jellis Craig website takes visitors to a list of the organisation's philanthropic interests, in this case, the National Breast Foundation and the Cerebral Palsy Education Centre. Perhaps the strongest reminder of pre-2.0 'value chain' communication practices is Hocking Stuart's 'Market Commentary'. This industry forecast is presented as quarterly report: an uploaded word document, with fixed content and without hyperlinks. This brochure or pamphlet approach is well outside the ecology engagement approach, in which response to market indicators are agile, achieved through the use of real time web analytics and data mining software agents. Typically, these insights are then dispersed to a connected community, in real or near-to-real time frames via blogs and twitter, ensuring optimum value to the company's customers. Hocking & Stuart, however, fails to engage with this community.

One area in which all the surveyed agents are 'tooled up' is in their use of search criteria. The impetus here is clearly linked to the subscriber log-in process which builds agencies' databases. Once they are signed-up, suitable property matches are relayed to prospective buyers and renters via sms and email, with the key incentive for users being that the service outpaces traditional media such as newspapers and mail-outs, which are hindered by publishing time frames.

But a limitation in the 'sign up for our email alerts' strategy is that it forces a relationship with the real estate organisation into which the prospective buyer may not be ready or willing to enter. A system which infers 'we won't give you our information if you won't give us yours' reinforces the value chain approach, which, as Chris Anderson (2009) points out, runs contrary to the governing ethos of the digital economy, in which the cost of providing digital content is so low that customers have come to expect content for nothing. Anderson argues that a consumer's decision to go with one supplier over another is based on trust and reputation. In the digital environment, a company's ability to provide value pre-sale is increasingly the measure by which customers make choices. Having to formally sign-up is antithetical to this trend, and may be a disincentive for potential customers (Bruns & Bahnisch 2009, 8). US Realtors The Good Life has responded to this by offering SMS updates to anyone who dials in. The agency gives away its email update service without requiring any information exchange at the outset. It treats its ability to deliver enhanced search, via locative technologies, as a service to users.

In summary, while some Australian real estate companies are more advanced in their ecology engagement strategies than others, the startling find is that given that real estate services' core business is pairing people with property — with all the elements of community and community understanding that this entails — there is so little evidence of user-generated content: no 'my pics', no 'my faves', no 'my street', no social network, and no peer-to-peer sharing transactions. In the Australian real estate industry in particular, the overall picture is one of conservatism, especially considering that in innovative industry and government circles, a concerted effort is being made to shift to an ecology engagement approach (Government 2.0 2009). Many companies now recognise the added value that productively engaged customers bring to a product, and encourage them to contribute to the design or marketing process (Seybold 2006), prominent examples being Lego's 'Mindstorms' project, Proctor and Gamble's 'Connect and Develop' strategy and Coca Cola's 'mycoke.com'. In the rest of this paper, we look closely at emerging ecology engagement trends and the ways in which the real estate industry is — or is not — using them.

Real estate locative media

For years, the real estate agent's toolkit consisted of a shiny car, a rotary membership and a bulging address book. Then, in the 90s, mobile phones entered their world, enabling agents to spend less time at their desks, and more time in the field. Fifteen years later, mobile phones are GPS-enabled, with computational powers nearing that of a laptop. By supplementing these with a high definition video camera, a 3G-enabled iPad or laptop, and Wordpress savvy, real estate agencies become agile. They can respond in real time to market and customer leads; a far cry from the not-so-distant days of weekly print media classifieds and dinnertime ring-arounds.

With GPS, locative media, sometimes expressed as 'bringing the Internet down to earth' (Collis & Nitins 2009), allow the location of the user to be pinpointed, and the mobile Internet allows the user to access locally relevant information, or to upload content which is geo-tagged to the specific location. This is referred to as 'context-aware media' and 'hyper-local services'. Location-based services are one of the fastest-growing segments of the mobile Internet market: the AIMIA report indicates that user access of local maps increased by 447% between 2007 and 2008, and restaurant guides/reviews increased by 174% (AIMIA 2008).

One new application poised to disrupt real estate practices is *Four Square,* which integrates social media with locative media. *Four Square* is a service built on top of a core principle in the ecology engagement environment: that being that customers are custodians of valuable knowledge and are willing to share it. Further, *because* they are active constituents, users have the ability to co-develop businesses' content and worth. Established in March 2009, *Foursquare* has over three million users ('Four square' 2010). With its tag 'Find your friends, unlock your city', *Four Square* links to users' address books, *Twitter* and *Facebook* accounts, enabling users to locate their friends, as well as to access and add their own tips about local experiences; commonly this translates as a good or bad retail experience, a great item on a menu, traffic conditions, or a special deal for *Four Square* users. Lead users garner incentives and rewards for their updates, or the number of times they visit a user-nominated *Four Square* site.

People interested in the property market can use *Four Square* to confer with friends or compete against them, for example, in the race to get to a hot rental property. Significantly, users are able to marshal their *own* networks, not the estate agents' networks, in order to do this. An estate agency might use *Four Square* to set up a rewards system for people who demonstrate a skill in predicting sale prices. The higher the accuracy, the more badges could be awarded, with the predictor eventually building her or his online reputation. *Four Squarers* could leverage their credentials in any way they choose, perhaps by including them in a CV, a job application or as private consultant (Hagel et al. 2009), or simply by creating a light-hearted rivalry within their own work, social and family networks.

But perhaps the biggest differentiator between estate agents who do use such tools and those who do not is the opportunity to capture real-time data. According to *Four Square*, it delivers statistics on 'most recent and most frequent users, the time of day people check in, total number of unique visitors, histogram of check-ins per day, gender breakdown of customers, and the portion of *Foursquare c*heck-ins broadcast to Twitter and Facebook'.[5] The greater the uptake, the greater the insight, and agents using *Four Square* could have a sizeable edge over competitors who persist with standard sign-ups on a website.

While *FourSquare* has not been taken up by real estate organisations as part of their ecology engagement suite of practices, real estate organisations are making use of locative media technologies, particularly through augmented reality applications, as we discuss in a subsequent section of this paper.

[5]   http://foursquare.com/businesses/.

Real estate games

In the online context, games are big news. In a 2010 TED Talks presentation, Director of Game Research & Development from the Institute of the Future, Jane McGonical (2010) reported that 500 million people spend 4 billion hours a week playing online games. Business information analyst Ibis*World* Australia found that the Australian video games market had grown by more than 16 per cent a year in the past five years, reaching a 29 per cent record in 2008–09 (IBISWorld 2009). PriceWaterhouse Coopers valued the digital games industry in Australia at $A1.5bn in 2008 and expects it to be worth $A2.2bn by 2014 (Bolton 2009). With such popularity, it is not surprising that virtual reality games are being introduced into training and education settings; for problem solving in business and enterprise, so-called called 'serious games' are being deployed.

In real estate, one often hears the common phrase, 'they are in the property game', when referring to developers or real estate agents. Prime-time TV features numerous renovation and vendor/seller real estate programs, often with a competitive element; and there is the enduring charm of *Monopoly*, one of the world's great board games. While internationally there has been some introduction of games applications as tools for real estate ecology engagement, the uptake of gaming has been surprisingly slow. There are several basic iTune app real estate games, such as *Property Mogul*, *100 Real Estate Terms to Know*, and *Real Estate Challenge*, but none of these has any social media integration or capacity for community interaction: all are simple quiz-type applications. Web-based game Predict@Zip Realty incorporates more social aspects of online multiplayer games. The game asks players to predict the sales values of houses in any area of the United States they choose. Players' estimates are then compared to actual sales prices; players closest to the sale price win 'PropertyIQ' points and a chance to be listed on the game's leaderboard. Players who submit valuations of more than 20 properties qualify for a monthly $500 prize drawing. Predict@Zip Realty not only engages the real estate community; it also harnesses significant value for its parent company, Zip Realty. Zip Realty aggregates players' estimates as a way of gauging popular sentiment about the value of specific areas, and or specific types of property. Zip Realty calls this aggregation the 'Market Sentiment Index,' and it includes the index score with each of the property listings on its site. In doing so, Predict@ZipRealty recognises 'the collective intelligence of the network — the fact that a million people will always be smarter than 20 people — and that there is business value in that differential' (Herz 2005, 328). Predict@ZipRealty thus not only engages the real estate community through gaming; it also leverages the results of that engagement and user-generated content in a way that generates further value for users (in giving real estate buyers a sense of popular sentiment about potential areas and houses), and which ultimately increases the value of Zip Realty's listing and selling services themselves.

Using games and game-like attributes to build ecology engagement has also entered Australia's online real estate landscape, specifically in the form of the site *Realty Tube* and realestate.com.au's game, *House Hunter*. *Realty Tube* is a real estate video channel that invites viewers to upload property videos, tag property videos, and alert friends to properties via their social networks or blog. Users can also comment on property videos, and mark specific videos as their 'favourites'. This is deemed 'site participation', for which users achieve recognition as 'newbies', 'junior members', 'members' or 'hero members'. Although the site is not itself a game, it draws on the gaming convention of building one's public status and reputation through ongoing participation. *Realty Tube* does not offer rewards for participation beyond these bragging rights (Figure 3). Like many massive multiplayer online games, *RealtyTube* relies on user-generated content — content which is generated by its provision of an enabling platform on which the real estate community can interact — for its value (Banks & Humphries 2008).

Figure 3: *Realty Tube,* a real estate video channel invites viewers to publically tag and rate properties. In return they achieve bragging rights, which they term as 'Hero member'.


Source: http://www.realtytube.com.au/videos/61/
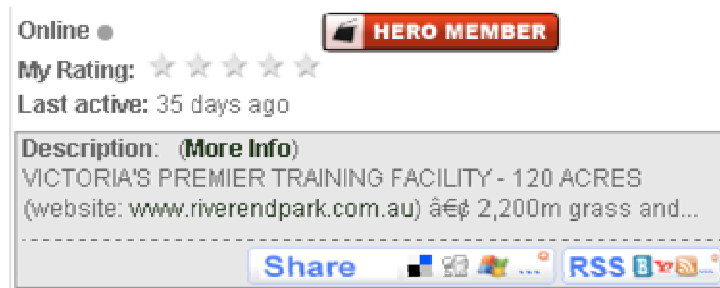
In another form of game, in April and May 2010, the recently revamped realestate.com.au offered readers a chance to win $50,000 by getting them to go on an online property hunt. In its game, *House Hunters*, one new property was released each week. A real estate question was posted on *Facebook*. New tools on realestate.com.au's website such as 'compare' 'gallery view' and 'street search' assisted users to find the property online. Weekday and weekly prizes provided incentives to keep playing, with the lure of the grand prize of $50,000 cash at the end (Figure 2). The game was tied in with social media sites so that players could share their own links and collaboratively create pathways to a solution.

Figure 4: Real Estate.com.au's *House Hunters* was played via *Facebook*

Source: http://apps.*facebook*.com/rea-househunter/?_fb_fromhash=7fb8e529e1757cd2567492a9566fe4df

Figure 5: *Househunter's* social media tie-ins
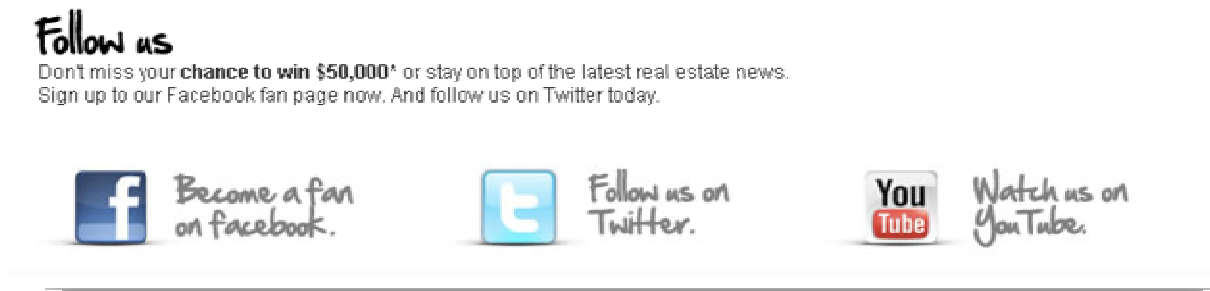
As a communication and ecology engagement tool, House Hunter allowed players to familiarise themselves with realestate.com.au's newly designed website and its tools through playing the game, and realestate.com.au gained valuable user data through Facebook analytics. In playing House Hunter, users were also likely to come across properties, or aspects of the realestate.com.au site, that they could refer on to members of their own social networks.

HouseHunters, Predict@ZipRealty, and *RealtyTube* represent the vanguard of the use of games for real estate ecology engagement. For the most part, real estate organisations have yet to engage with the real estate community through gaming; in failing to do so, they fail to harness some of the wealth of information and sentiment which circulates within the community, and they fail to build their own reputations as active and engaged members of that community, or ecology.

Online mapping

In the past, maps were static documents produced by cartographic specialists. With the advent of 2.0 technologies, mapping has become a dynamic, and an increasingly user-driven, activity (Perkins & Dodge 2008). 'Citizen cartography,' enabled by open-source applications such as Google *Maps* in particular, allows users to add content to maps, productively populating maps with data that has meaning to them, and with data that can be changed and updated dynamically. The leading application in combining online mapping with real estate data, Google Real Estate, is receiving considerable attention as it begins to overlap with existing commercial search operations in the real estate industry. Although it has been flagged by industry monitors as a potential game-changer, uptake or overtake of the Real Estate tool from existing commercial operations may not be as quick as is usual with Google innovations. This is because it is not, as yet, a stand-alone segment of the Google product suite. Although it has distinct functionality, the Real Estate function is indivisible from Google's existing *Maps* tool. However, Google saw growth of approximately 40% in real estate searches between January 2009 and January 2010 (LeMay 2010). In February, Google celebrated having linked 1000 real estate sites to the Real Estate tool.

Embedded into the existing Google *Maps* utility, the Google Real Estate tool allows web users to navigate the familiar *Maps* environment easily, without having to re-learn basic operational functions. These key considerations greatly increase 'first-impression' usability and may prove critical to maintaining user engagement. But industry reports signal that Google real Estate may not succeed in Australia because *Domain* and realestate.com.au (REA Group) have not allowed their listings to be aggregated into it.

Upon loading the Real Estate help page, users can begin searching for listings, via either suburb name or postcode.
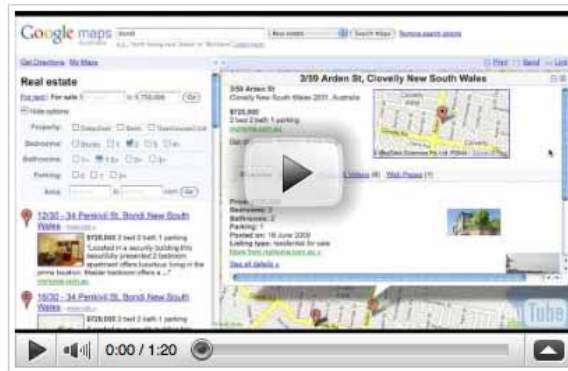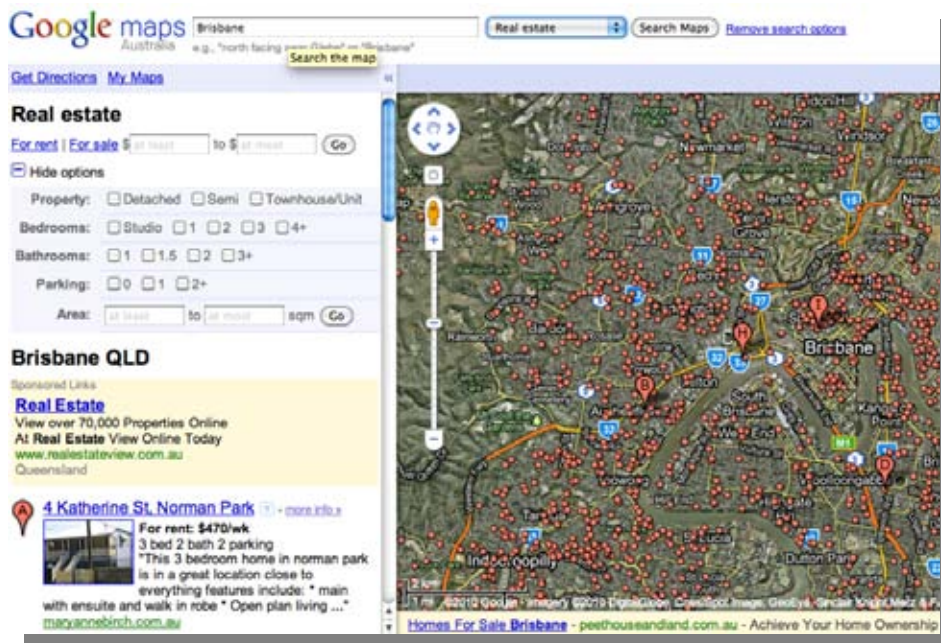
Or, real estate listings can be accessed by a search for 'Real Estate' in the Google Maps search box. This populates the Google *Maps* view with relevant results.

Standard map navigation techniques — such as zoom and street name search — act as search filters and the relevant results will update relative to the user's view. While the web platform combines Google's powerful search functionality and easy navigation, it does not, currently, support unmediated mobile application integration, locative technologies, or augmented reality functionality. Further, it does not support user-generated content, or user interaction. Instead, it directs searchers to real estate agency listings. Only property vendors — a click of the 'add a property' link leads to a page titled 'Google for real estate professionals' — can contribute to Google Real Estate. While Google Real Estate is certainly easy for end-users to use, its communication is strictly one-way: it makes one-way real estate communication more efficient, but it does not open it up to ecology engagement.

Augmented reality

Another significant tool in real estate communication is augmented reality. A further development of locative media, mobile phone augmented reality applications allow users to point their cameras at, for example, a building or geographical site, and to have the image of that site overlayed with real-time web content. Augmented reality currently works on 4G iPhones and Google Android systems. Industry press is positive about the potential for augmented reality in the context of real estate; although some note that it is the 'cool factor' more than the practicality factor which will appeal to early adopters (Veiga 2010).

In France, MeilleurAgents.com has released an augmented reality application for Android and iPhones that displays the value of every building in central Paris.[6] Trulia real estate has similarly incorporated the Dutch Layar augmented reality platform into an augmented reality iPhone app, as have *HotPads.com* and *ForRent.com*. These only list US properties. Launched in March 2010, *HomeScan* combines locative media and augmented reality technologies to allow users to point their iPhones at a given property to see its real-time real estate listing, size, interior photos, value estimates, and details of other listings nearby. ZipRealty indicated that this free iPhone app had been downloaded one million times in its first month (Macintosh 2010). The app only covers US markets.

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6   http://www.meilleursagents.com/layar/.

In Australia, Layar also offers an Australian iPhone app, *LiveSpot Property*,[7] which brought augmented reality to Australian real estate communities in March 2010. Also in Australia, the Commonwealth Bank announced in late April 2010 that it would shortly launch an augmented reality real estate iPhone app which it claims is 'an industry first in Australia' (Commonwealth Bank 2010), using listings from *rpdata.com* and *realestate.com.au*. Insqribe's augmented realty *Housefinder* iPhone app, a St George bank product which aggregates Australian Property Monitor data, similarly allows users to see an overlay of house prices (both for sale and sold) by pointing their iPhone camera at a given property or street.

Source: http://itunes.apple.com/au/app/housefinder/id369694794?mt=8

While these augmented realty applications allow users to access information more easily, and in an innovative way, they remain outside of the ecology engagement approach at this point. Users can filter the information they see based on their specified preferences, but this is as far as user

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7   http://site.layar.com/livespot-property/.

interaction goes. These applications do not allow users to upload their own content — such as photos or comments — to the visualised data; they remain a channel for one-way communication rather than a platform for engagement.

Conclusion

As this paper's case study of one major industry has demonstrated, there remains a significant gap between theories of 'value ecology' and ecology engagement practices, and the application of these theories in practice, at least in one significant industry. At this point, it is clear that real estate organisations both in Australia and internationally have yet to fully take up the opportunities of the ecology engagement approach to communication and value creation. Multiplayer online real estate games exist, augmented reality and locative media real estate listing applications exist, and real estate-related social networking sites exist. But to date, no one has combined these three functionalities. More importantly, even when they do employ innovative technologies such as augmented reality, real estate organisations appear universally reluctant to relinquish the control of the 'value chain' communication approach and to allow the massive ecology of real estate customers and enthusiasts to actively participate in and build their online presences. Although one of the key attributes conducive to an ecology engagement approach is clearly in place for the real estate industry — that is, the existence of a substantial extant community of interest around real estate — the second key attribute — understanding the dynamics of online networks — is apparently nascent in Australian real estate organisations.

This is not to say that shift to an ecology engagement approach is easy, or a simple matter of building a platform and magically harnessing the value of thousands of users' inputs. Enabling ecology engagement takes ongoing effort: it is 'as much an art as a science' (Herz 2005, 341), and can be 'a major challenge for site operators' (Bruns & Bahnisch 2009, 20). While there is clearly business value in shifting to an ecology engagement approach, there is also cost associated with the employment of new personnel and technologies with the capacity to initiate — and sustain — active communities of online users and user-generated content. It may be the case that, as well as fearing a loss of communication control, real estate organisations are waiting for the costs of 'ecology management' personnel to come down to a price which makes the shift more inviting.

Real estate businesses most likely to employ online and mobile ecology engagement tools, certainly those in Australia, are third-party organisations, predicated on aggregation and search functions. Similarly, organisations such as Facebook and *Wikipedia*, which are founded with the sole purpose of enabling ecology engagement, find this type of engagement more comfortable than longstanding organisations more used to conventional 'value chain' approaches. Arguably, third-party real estate ecology engagement companies have more room for innovation, as they have less accountability than traditional real estate companies, which typically have one-to-one relationships with vendors and purchasers during a property's sale cycle. Not only are the latter companies bound by Real Estate Institute guidelines and professional practice compliance, but they forge strong personal bonds with their customers, especially when the circumstance of sale might entail bereaved relatives, a marriage breakup, or financial insolvency. It is therefore, all too easy to charge real estate agencies with rigid adherence to old-fashioned practices, as this ignores the sensitive role they are play in what for many people, is a rite of passage. In the case of organisations whose reputation is hard won, sometimes over decades, it is hardly surprising to find that they might be reluctant to cede control of the communication connected with their brands.

Paradoxically, the one property company in the study that fits with the ecology engagement paradigm, the aforementioned *Bigger Pockets*, does not have, nor does it seek to have, direct involvement in the buyer–seller relationship. Instead, the business facilitates 'knowledge, networking and dealmaking' amongst a geographically dispersed, investor community. *Bigger Pockets*, therefore, sidesteps the kind of cultural and community sensitivities that are a necessary part of being a 'high street' real estate firm.

In the real estate industry, it appears that there is a disconnect between the management of online communities, and the management of geographically defined ones. Marrying the two is no easy task. The down side is that until they do so, traditional real estate organisations will sequester themselves from the potential value-add of engagement with the value ecology. Radical steps by these organisations into ecology engagement are therefore unlikely, and instead, will play out over time.

R E F E R E N C E S

Anderson, C. 2009. *Free: The future of a radical price.* USA: Harper Collins.

Australian Bureau of Statistics (ABS). 2004. 8663.0 — Real Estate Services, Australia, 2002–03. Retrieved 10 August 2010, from http://www.abs.gov.au/ausstats/abs@.nsf/mf/8663.0/.

Australian Interactive Media Industry Association Mobile Industry Group (AIMIA).2008. *Australian Mobile Phone Lifestyle Index*. Retrieved 10 August 2010, from http://www.aimia.com.au/enews/events/AMPLI%202008/AIMIA_ReportAugust2008_FULL_Final.pdf.

Baen, J.&. Guttery, R. S. 1997. The coming downsizing of real estate: Implications of technology. *Journal of Real Estate Portfolio Management*, 3(1), 1–18.

Banks, J. & Humphries, S. 2008. The labour of user co-creators: Emergent social network markets? *Convergence*, 14: 401–18.

Bauwens, M. 2006. The political economy of peer production. *post-autistic economics review*, 37, 33–44.

Benkler, Y. 2006. *The wealth of networks: How social production transforms markets and freedom*. New Haven: Yale University Press.

Bolton, R. 2009, 5 Oct. Game maker set for some serious money. *Australian Financial Review*.

Bruns, A. 2008. *Blogs, Wikipedia, Second Life, and beyond: From production to produsage*. New York: Peter Lang.

Bruns, A. & Bahninsch, M. 2009. *Social media: Tools for user-generated content*. Retrieved August 2010, from http://eprints.qut.edu.au/21206/1/Social_Media_-_State_of_the_Art_-_March_2009.pdf.

Collis, C. & Nitins, T. 2009. Bringing the internet down to earth: Emerging spaces of locative media. In F. Papandrea & M. Armstrong, (compilers), *Record of the Communications Policy and Research Forum 2009*, pp. 122–30. Sydney: Network Insight.

Commonwealth Bank. 2010. New Commonwealth Bank iPhone application industry first in Australia. Retrieved 6 May 2010, from http://www.commbank.com.au/about-us/news/media-releases/interactive/iphone/default.aspx.

Foursquare (Social Networking). n.d. Retrieved 10 August 2010, from http://en.wikipedia.org/wiki/Foursquare_(social_networking).

Government 2.0 Task Force (Australia). 2009. Engage: Getting on with Gov 2.0. Retrieved 10 August 2010, from http://www.finance.gov.au/publications/gov20taskforcereport/doc/Government20TaskforceReport.pdf.

Hagel, J., Seely Brown, J. & Davison, L. 2009. Introducing the collaboration curve. Retrieved 24 September 2010, from http://blogs.hbr.org/bigshift/2009/04/introducing-the-collaboration.html.

Hartley, J., Potts, J., Cunningham, S. & Ormerod, P. 2008. Social network markets: A new definition of the creative industries. *Journal of Cultural Economics*, 32(3), 166–85.

Hearn, G. & Pace, C. 2006. Value-creating ecologies: Understanding next generation business systems. *Foresight*, 8(1), 55–65.

Herz, J. 2005. Harnessing the hive. In J. Hartley, (ed.), *Creative industries*, pp. 327–41. London: Blackwell.

IBIS*World*. 2009. *Video games in Australia: Australian industry report*. Retrieved 10 August 2010, from http://www.ibisworld.com.au/industry/default.aspx?indid=1906.

Jeffcutt, P. 2004. Knowledge relationships and transactions in a cultural economy: Analysing the creative industries ecosystem. *Media International Australia,* 112, 67–82.

LeMay, R. 2010. REA, Domain snub Google's real estate. Retrieved 6 May 2010, from http://www.zdnet.com.au/rea-domain-snub-google-s-real-estate-339301173.htm.

Lorenzen, M. & Frederiksen, L. 2003. Experimental music: Product innovation, project networks, and dynamic capabilities in the pop music industry. IVS/DYNAMO working paper, Copenhagen.

Lorenzo-Dus, N. 2006. Buying and selling: Mediating persuasion in British property shows. *Media Culture Society,* 28, 739–61.

Macintosh, R. S. 2010. Portable real estate listings — but with a difference. Retrieved 6 May 2010, from http://www.nytimes.com/2010/03/26/greathomesanddestinations/26iht-rear.html?pagewanted=1.

McGonical, J. 2010. Gaming can make a better world. Retrieved 16 April 2010, from http://www.youtube.com/watch?v=dE1DuBesGYM.

NielsenWire. 2010. Led by Facebook, Twitter, global time spent on social media sites up 82% year over year. Retrieved 10 August 2010, from http://blog.nielsen.com/nielsenwire/global/led-by-facebook-twitter-global-time-spent-on-social-media-sites-up-82-year-over-year/.

Noble, S. 2008. Australian adult social technographics revealed. Retrieved 14 April 2010, from http://www.forrester.com/rb/Research/australian_adult_social_technographics%26%23174%3B_revealed/q/id/46786/t/2.

Perkins, C. & Dodge, M. 2008. The potential of user-generated cartography: A case study of the OpenStreetMap project and Manchester Mapping Party. *North West Geographer*, 8(1), 19–32.

Seybold, P.B. 2006. *Outside innovation: How your customers will co-design your company's future*. USA: HarperBusiness.

Stabell, C. & Fjeldstad, O. 1998. Configuring value for competitive advantage: On chains, shops, and networks. *Strategic Management Journal*, 19, 413–37.

Tuccillo, J. 2002. *New business models for a new economy: Remaking the four businesses of real estate*. Chicago: Dearborn Financial Publishing.

Vargo, S. & Lusch, R. 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing,* 68, 1–17.

Veiga, A. 2010. Real estate mobile phone 'Augmented reality' apps more novelty than novel idea at this point. Retrieved 6 May 2010, from http://blog.taragana.com/index.php/archive/real-estate-mobile-phone-augmented-reality-apps-more-novelty-than-novel-idea-at-this-point/.