

Adapting Marketing to Mobile: Real-Time Website Data Using The RETS Web API

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AUDIENCE

- **REALTORS®** who manage the technical aspects of their own website that displays listings from the MLS.
- **REALTORS®** who operate a website that displays listing from the MLS but who contract the technical portion of the website out to a third party.
- **Consultants and third-party vendors** vendors who develop websites for REALTORS® wanting to display listings from the MLS.
- **MLSs** looking for a more secure, modern method for the transport of data, as well as a means for providing new services created by a diverse array of vendors and developers.

ABSTRACT

The purpose of this white paper is to introduce REALTORS® to a low- cost, real- time approach to displaying listings for consumers. The approach is based on the RETS Web API and is ideal for existing websites as well as mobile and wearable applications. The term API is short for Application Programming Interface.

OVERVIEW

Displaying listings on websites is a practice that has been around as long as consumers have been using the Internet. Over the last 20 years, marketing for REALTORS® has shifted from print to the Internet. This shift was a reaction to changing customer behavior. NAR recognized the consumer shift from print to Internet when it created Realtor.com®, a single source for listings.

An over-reliance on advertising led to the failure of many Internet-based businesses during the Internet crash of the late 1990s. At that time, website operation was expensive, and costs could not be covered by advertising alone. Hardware and software had few standards and required specialized expertise to operate.

In 1999, NAR began an organized effort to standardize and modernize information transmission, bringing together vendors and technology suppliers to look at the inefficiencies in the industry and make recommendations. The group published its findings as the Real Estate Transaction Standard (RETS). RETS, as well as other standards, are now maintained by the Real Estate Standards Organization (RESO).

After the dot-com bust, the cost of operating websites dropped, reaching a point where brokers could afford to display listings on their own websites. Consumers visited websites that offered “MLS Searching” to find listings. Data Standards like RETS assisted these efforts. This model matured as consumers became comfortable using search engines to identify properties for sale.

Over the last decade, listing data has become increasingly available to the consumer, giving third-party aggregators a point of entry into the market. These businesses take advantage of low technology costs and readily accessible content. Although advertising revenue covers more of the operating costs than during the “bubble years,” a new kind of revenue is being sought based on consumer control.

Third-party aggregators are currently commanding high valuations on Wall Street. But another shift in consumer preference is looming. Consumers are embracing mobile technology. Phones, tablets, and wearables challenge the traditional Internet marketing model. Websites designed for desktop browsers need to adapt to the performance and device-specific characteristics of mobile to preserve their business models.

One of the biggest changes that mobile introduces is in the nature of search. Instead of searching for a collection of listings that fit search parameters, mobile requires near instant access to specific listings. It is more important to deliver the specifics of a property quickly than to deliver a number of summary descriptions. Location services have ushered in this change. They replace tradition “bed, bath, and city” style search pages with “show me [this address]” or “what is nearby” results. RESO has developed a separate standard to accommodate this style of search called the RETS Web API. The term API, short for Application Programming Interface, describes a data transportation method that eliminates the need to copy listings between servers.

This new paradigm for search eliminates the overhead of making copies of listings. Keeping copies accurate is still a difficult and expensive technological challenge. The time and money required to do so is typically affordable only to large-scale businesses. In the end, if the nature of search is changing, the investment is not a good one.

The RETS Web API is the easiest way to “future proof” your Internet marketing activities. It can be used to support the current, traditional website models and also the emerging mobile marketplace.

TYPES OF REAL ESTATE WEBSITES

Real estate has always had strong consumer appeal. Like fashion and automobiles, it captures

the imagination. Consumers spend hours looking and dreaming as they comb over pictures and descriptions.

Internet marketing shares two important characteristics with its print-based predecessor: advertising and compelling content. Internet advertising sales generate revenue to cover, or significantly reduce, the cost of operating a website. Compelling content attracts consumers who in turn view the advertisements.

In real estate, there are two kinds of websites. One I will call *traditional* and the other *transactional*. In addition to technology, they both rely on fresh listing content to achieve their business goals.

Traditional websites use listings as compelling content for selling advertising and rely on this advertising revenue to cover expenses. Third-party aggregators tend to fall into this category of website. Content is collected and organized (curated) from content providers. The website is a conduit between the content provider and the consumer. Outside of real estate, content creators can be news organizations, freelance writers or bloggers. Inside of real estate content creators are REALTORS®. Third-party aggregators must provide a reciprocating value to the content creators to keep content fresh. Without fresh content, consumer traffic drops along with advertising revenue. Reciprocating value is offered in the form of lead generation.

The goal of transactional websites differs from that of traditional websites because their primary goal is lead generation. Both types of sites use listing content as a consumer draw, but transactional sites focus on advertising products and services of the REALTOR®. Compared to traditional websites, lead generation in transaction websites is not a byproduct of operations.

INTERNET ADVERTISING PRESSURE

One of the first applications handled by browsers was publishing academic papers. Academics communicated with browsers as an alternative to mail, paper, or telephones. It is easy to understand why commercial websites, given their heritage, also inherited other characteristics of print media.

When business adopted distribution through the Internet, advertising models that were well-known in print media were applied. But advertising rates on the Internet quickly dropped to levels that were significantly lower than those found in print media. Internet advertising rates remain low today.

There are several theories why Internet ad rates are lower than those for print. Some argue that the increase in outlets that advertisers must cover with their budgets has grown so fast that they cannot pay the high rate. There are just far too many websites targeting the same demographic profile. Others argue that consumers have lost the loyalty they used to display toward publications. They change their favorite websites more often than they used to change their magazine subscriptions. The real answer is most likely to be a combination of both supply/demand forces, as well as shifting consumer preference (Swartz, 2009). Consumers increasingly use the web for information rather than print media creating a business challenge for content distributors (Sasseen et al., 2013).

In order to create the large audiences needed to generate meaningful advertising revenue, operators needed to find compelling content. Once a visitor is on the site, content variety was used to sustain their attention in the hope that they would view advertising. Among web designers, this command of attention span is called “stickiness.” Typically, the most engaging content also commands the highest advertising revenue. Web operators would say, “The stickier the site, the higher the revenue.”

Websites use techniques such as “banners,” “pop-ups,” and “skyscrapers” to display

advertising (“*Online Ads: A Guide to Online Ad Types and Formats*,” n.d.). Each of these reduces the screen space used to display content. Over the last 20 years, computer monitor resolution and screen size have increased to the point that consumers hardly notice advertising as they browse the Internet. This has further reduced the price advertisers will pay operators for displaying their ads. Internet advertising revenue has been reduced by improvements to computer displays.

One technique used to draw readers’ attention to Internet advertising is radio- or television-style interruptions (Campbell, 2014). In Internet parlance, it’s called “interstitial advertising.” When users click on links that they expect will take them to content, they are first presented to a full page of advertising. Users are accustomed to this approach during passive activities like listening to the radio or watching television. During active experiences like surfing the Internet, users do not expect to see pages of advertising. On YouTube, and other video-heavy sites, users have become accustomed to the video playback being delayed for a few seconds or more with interstitial advertising.

The growing consumer adoption of mobile devices is further changing website economics (Fiegerman, 2013). Because mobile screens are smaller than desktop monitors, this trend will result in consumers shying away from websites designed solely for desktops. Screen space dedicated to advertising will be noticed and will drive traffic down.

One possible remedy for maintaining advertising revenue in the mobile space would be to reduce the number of ads or the space dedicated to advertising. Generally, this tactic requires large audiences for the website to generate operational revenue. There will be a point where the advertising model no longer works.

REALTORS® do not operate websites to generate advertising revenue. Their websites are the advertisement. Therefore, the screen space issue

resulting from mobile use is not an issue for most REALTORS®' sites.

MOBILE CHANGES SEARCH

As mentioned, real estate websites typically present “bed, bath, city” style query forms to the consumer. This approach has been used since listings have been available in the Internet. Information from the form is used by the website to execute a search and return a collection of listings to the consumer. Each listing in the search results is only a summary of the complete property information. Consumers can quickly scan the summary results before asking for full detail behind a single property.

Mobile changes the form-based search model. Search from a phone is a “show me this” experience where searches are not conducted from information typed into a form. Searches are instead executed from location information or other, more dynamic factors. A common mobile experience for a consumer would be to stand on a corner and use a phone, with the expectation of finding all the listings within walking distance. .

The input devices of mobile limit the amount of typing consumers will tolerate to view the Internet. Although there are “soft keyboards” and continuous input mechanisms (e.g., Swype) available, filling out a search form in the traditional way is not practical.

Mobile searches are more likely to produce fewer results, and those results need to be presented to the consumer in summary form. Instead of “paging” through result sets, a mobile result set might look more like a slide deck with fewer than 10 slides. With a simple gesture (like a “swipe”), consumers could move through listings. Listings might even be presented with the closest property being shown first.

OBTAINING LISTING CONTENT

Multiple Listing Service (MLS) organizations located across the country still offer the most complete and accurate inventory of homes for sale. The MLS has two primary roles:

- Maintain accurate information about real estate listings
- Inform all parties about the terms of cooperation and compensation associated with each listing

The MLS predates the Internet and was originally implemented as a paper-based publication. New “books” were printed and distributed to members (called “participants”) every month. The format used to present each listing in a “book” was not standardized across MLS service areas.

Members of the MLS have access to this information for use (within the governing rules of the MLS) in their Internet marketing activities. When the MLS first made listings available to members in electronic form, there were no standardized formats. Downloads were made with the File Transport Protocol (FTP). Information was simply an electronic form of the “books” that had no standard format.

This is where RETS came in. As a standard, RETS allows for the data to be more portable. -At the outset, NAR led the development of the RETS standard. RETS is now maintained by a group of companies called the Real Estate Standards Organization (RESO). NAR is still a major contributor to RESO.

RETS has been adopted by most MLS operations and is still in the process of being improved by RESO. Although RETS defined a common transmission mechanism, it did not feature a common data dictionary of terms. This resulted in MLS data that was similar but not identical across operations. RESO published a data dictionary in 2013 to complement the RETS transaction standard.

For many business purposes, including website support and data sharing agreements, RETS works well. When used for these purposes, a

copy of the MLS is transmitted between parties. Each time a copy is made, controls must be in place to ensure that timely updates between parties are executed and that unauthorized distributions are not made. These considerations are handled with legal agreements and not technological solutions.

SUPPORTING MOBILE CONTENT ACCESS

RESO recently published a new mobile-oriented standard called the RETS Web API. The RETS Web API adds the ability to access data without making a copy. Maintaining the integrity of copies is expensive and a distraction from the goal of providing accurate, time-sensitive information. This capability is critical to serving the mobile consumer.

The complexity of the original RETS, with respect to creating “mirrors” of information, is not found in the RETS Web API. Mirroring is not needed for mobile. Philosophically, the phrase “the closer the consumer is to the data, the simpler the mechanisms should be” captures the difference between the approaches. Consumers expect instantaneous (some call this “real time”) access to information, especially in the mobile space. The RETS Web API is a simple and fast mechanism that satisfies this need.

Furthermore, the RETS Web API can be implemented using software tools and techniques that did not exist 15 years ago. As the Internet matured, heavy traffic and rapidly changing consumer preferences created the need for original approaches and tools to evolve. Mobile is simply another change agent in the maturity process.

MORE THAN MOBILE

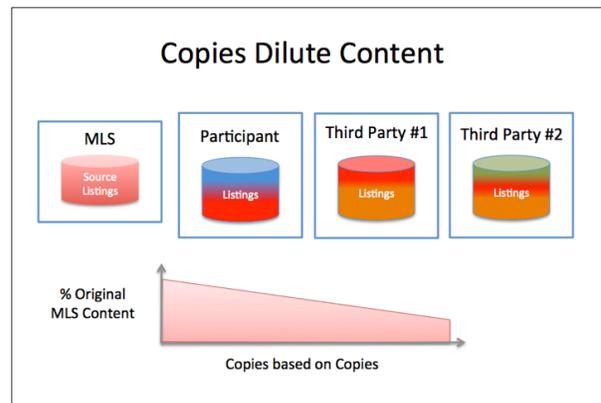
The RETS Web API is not a replacement for the original RETS approach. The two standards complement each other and are designed to address different needs. Understanding the business cases supported by each approach

allows you to make informed decisions about your Internet marketing approach.

The original RETS approach supported MLS duplication, also called “bulk downloading.” A copy of the MLS information, including text and images, is made on the broker’s computer. This is still a useful and viable strategy to support MLS data sharing arrangements, Virtual Office Websites (VOW), and Internet Data Exchange (IDX) arrangements.

However, every standard performs well in some situations and poorly in others. A mechanism designed to move and keep many listings in “sync” (like original RETS) will not be able to match the performance of an approach that displays information on only a limited number of properties (like the RETS Web API).

Using the original RETS approach, listings from the MLS are copied to the operator’s website, typically once a week. Every night, changes from the previous day are downloaded. The broker’s copy is stored using a technology (relational



databases) that disassembles the listing into pieces (fields). The same technology can be used to quickly reassemble the pieces into many forms. This is a good approach if the brokerage needs listing information for many applications, all of which need a different set of fields. Examples might be a website, CMA, BPO, etc.

Operating applications that require in-house, replicated MLS data are less common than they were ten years ago. Those who invested in the

development of these specialized applications in the last four years would find it difficult to justify today.

In addition to being expensive to maintain, copies of MLS data create a data integrity challenge. It is difficult to ensure that a copy of data has not been changed somewhere down the line. Each copy creates a new “generation” of data.

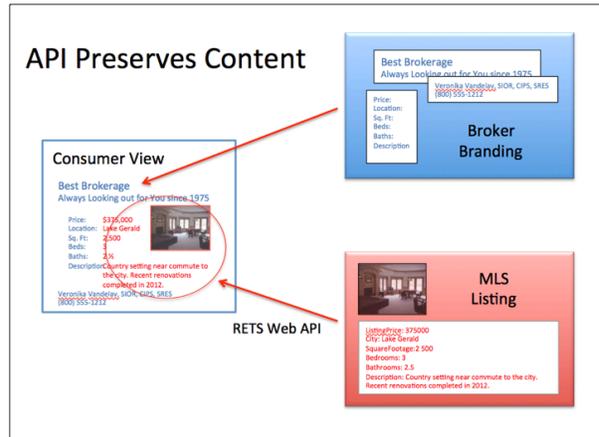
If website operators display listings from a copy of data, the consumer will not know how accurate the listing data on the website is. Think about the children’s party game “telephone.”

The message at the beginning of the chain is usually not the same as the message at the end. The children’s game is amusing. The effect on the consumer is not.

A variety of services that do not require maintaining copies of MLS data are available today. These services are based on the same approach found in the RETS Web API and have roots in Internet advertising displays. Internet advertising is delivered to the consumer from different servers than those used to host the website. Although the consumer sees a single page that includes advertising, the information comes from a variety of servers. Listing

information can be presented to the consumer with the same model.

No copies are made with the API approach. The savings in hardware, software, and human resources make this style of data delivery cost



effective. As a bonus, the API approach preserves the integrity of the data.

Many brokers still feel that a branded website is an important part of their lead-generation model. Modern, consumer-facing website technology is very API compatible compared to the approached of only a couple of years ago. The RETS Web API can supply accurate and timely listing information to an existing website in a cost-effective manner.

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