GOOGLE, IS THIS MY SEO?
Executive Summary

It’s been a whirlwind of a decade for real estate technology. Listings are receiving more exposure than ever thanks to numerous industry advancements. However, these innovations are causing confusion about a key question: Who owns the product? In this case, the product is the listing information that is obtained, curated and uploaded by a listing brokerage. Does that listing brokerage get enough credit online for the listings they have in their inventory that get exposed to thousands of sites worldwide?

In the realm of Search Engine Optimization (SEO), organic traffic is king. Sites that are authoritative sources with the most recognized knowledgeable content on a specific subject move higher in search engine rankings. As any real estate agent could tell you, there is no end to Search Engine Optimization “experts” looking to sell strategies and placements to help rank higher on Google, Bing and the rest.

Redfin believes the listing broker deserves the SEO benefit, proposing a policy to create plain HTML deep links back to listing brokerage property detail pages. This would drive SEO back to the listing brokerage and show search engines where the listing originated from, naming them as the authoritative source. NAR is considering implementing a version of this policy change to MLS Policy 7.58 (IDX), 7.87 (Aggregators), and VOW Policy Section 19.18(a).

This paper offers knowledge behind several conclusive insights:

The central theme of the conclusions is that the effectiveness of this policy can only be discovered after implementation, requiring significant financial and time resources before the value can reasonably be confirmed. For a policy change of this magnitude, a phased approach will be a key to success. Early adopters could propel eventual widespread usage by sharing learnings that alleviate concerns. MLSs could greatly impact policy implementation in a standardized way, reducing brokerage costs.

Google will not reveal its algorithm, so the only way to know the policy’s effectiveness is to implement it. SEO algorithms change over time and at this point it is impossible for MLSs to show brokers what their return on investment would be going forward. MLS compliance staff resources also need to be included when evaluating costs.

*MRED recommends the committee consider making this policy initially optional. Early adopters can demonstrate SEO benefits, cost to implement, compliance resource requirements and effective mitigation of legal risk. This provides them the umbrella coverage provided by NAR while also allowing those brokers and MLSs voicing concern to make a data driven decision during a subsequent meeting when sufficient data has been collected.*

Benefits to Phased Approach:

**Jump Start**

- Making this an optional policy enables equipped markets’ adoption to start sooner while allowing remaining marketplaces to stay in compliance. It also allows for efficient use of
resources to be able to take the lessons learned from early adopters to help strategically move the industry forward.

- If policy requirements are passed in November of 2018, implementation by January of 2019 is not feasible because the technical requirements across hundreds of MLSs and thousands of IDX sites require significant development effort and testing.

**Cost Savings**

- MLSs, IDX vendors and portals will incur technical costs of implementation, with those costs ultimately being passed to the broker.
- Delaying implementation will enable RESO to develop a standardized link and for MLSs to develop best practices for implementation, communication, compliance, etc.
- Some brokers are concerned about a negative impact on their business and have asked for a broker or MLS opt-out. When MLSs force brokers to implement technologies and/or policies that they perceive as harmful to their business, this puts MLSs in an adversarial position with their customers. A phased implementation approach will enable those brokers and MLSs to evaluate actual data from markets that have implemented the policy.
- The compliance effort required for MLSs to police the brokerage website links is significant. How will SEO be impacted if websites contain broken links or links to poorly maintained broker sites? Or what if links go to inappropriate websites or do not deep link to a listing?

**Safeguarding Consumer Experience**

- Having a test market would be instrumental for brokerages, which are primarily focused on the consumer experience. Brokerages hold varying opinions on whether this policy will improve or inhibit the consumer experience.
- SEO experts advise that Google’s SEO algorithm seems to favor sites that provide consumers with the best experience. This policy change is intended to redirect traffic through SEO manipulation and a concern is that Google will penalize sites that make this change because the consumer experience might be negatively impacted.
- There are disagreements among SEO consultants on how differing JavaScript implementations impact Google ranking.

**Legal Protection**

- Attorneys’ opinions differ on the potential antitrust risk associated with the proposed policy. This policy change is an agreement among competitors that is designed to change the nature of certain elements of competition. In order to mitigate legal risk, it would be beneficial to have actual data. This would support the policy’s positive benefits in early adopting markets and limit perceived risks.
Now, Let’s Dive In . . .

We will explore a few of the potential benefits and consequences of this proposed policy change while learning more about Search Engine Optimization and how that can help all of us with proper listing attribution. We gathered information through research, opinions from experts and interviews with brokerages accounting for a significant portion of the market share in the Chicagoland service area. We have woven their concerns, questions and opinions throughout this paper so that all aspects can be considered prior to making a decision on this policy.

This problem does not have an easy solution. Proponents of this policy anticipate extremely positive benefits of a successful implementation. Proper planning and timing help to mitigate any risks. This is especially true when dealing with Google, the omnipresent data company in our lives.

Defining the Problem and SEO Landscape

In the day-to-day market, understanding who has claim to a listing is easy to understand. Sellers enter into a contract with a brokerage, represented by a designated agent, to expose their home to the market at large. The listing agreement governs the ownership and responsibilities of the transaction between parties.

Once that real estate listing information makes its way online, that “ownership” gets murkier. Yes, the contract will still be done and the sale completed with the listing agent. A central issue driving the policy change is this: Is the source of listing offline getting credit online?

As an example, Jane Realtor from ABC Homes Brokerage procures a new listing and inputs that listing into the local multiple listing service. ABC Homes Brokerage opts into syndication of their listings to third-party sites, so once active, the listing begins to display on the leading national real estate syndication site MegaRealEstatePortal.com, and through IDX it displays on the local competitor’s site, 123REBrokerage.com.

In both cases, ABC Homes Brokerage is identified as the listing brokerage as part of the rules of that MLS, but there is no linking for either ABC Homes Brokerage or Jane Realtor. Instead, when an online consumer is interested in setting up a showing to see this new listing, that generated lead goes to two competing buyer agents; an agent from another community who has purchased zip code exposure on MegaRealEstatePortal.com, and the competing managing broker at 123Brokerage.com who will then refer that lead to one of their agents. Any Search Engine Optimization created goes to MegaRealEstatePortal.com and 123REBrokerage.com...not necessarily ABCHomesBrokerage.com.

“Google, Where is My Search Engine Optimization?”

If you have asked yourself this as a listing agent or brokerage, then you are one of the many who wonder if the leads being generated from your work belong to you or to those mediums that promote your listing. It is a question of listing attribution, and a recognition of authoritative source from the most powerful of search engines that literally make or break businesses online every day.
As a content provider, what claim do you have to the “Google juice” being created by your listing photographs, copy and other media? As an advertising medium, what claim do third parties have to traffic brought in by their development and marketing teams that have taken that data and brought unique life to it, that attracts a consumer to it more so than the originator of that information?

In this symbiotic relationship, are both sides getting what they deserve? And do we have the best solutions (policy, technology, compliance, etc.) in place to ensure equitable treatment for all stakeholders?

Key Definitions

If you are not well-versed in Search Engine Optimization (SEO), then you are most likely already a bit lost. Before we go any further, let’s define terms that we will use throughout this paper so that we all share a common understanding.

- **Search Engine Optimization (SEO):** (also referred to colloquially as ‘Google juice’): The process of affecting the online ranking and visibility of a website or web page(s) in unpaid, organic results of a search engine¹

- **Authoritative Source:** A work generally known to be credible, due to its endorsement by experts. In the digital world, the experts are links from credible sources to the content².

- **Listing Attribution:** Ascribing the work of a listing to the person or company who procured that relationship with the seller; giving the listing agent or brokerage credit through linking

- **Index:** The location that Google stores all pages that it has read and analyzed for content and meaning so that they can be shown in Google search results³

- **Crawl:** The process Google uses to identify new or updated pages, through links, sitemaps and other means⁴

- **Black Hat/White Hat SEO:** Referring to practices of building and maintaining a search engine optimization strategy; Black Hat⁵ would be unethical gaming of the system through programming techniques like keyword stuffing, invisible text, etc. White Hat⁶ would be ethical, sustainable content building meant for a human audience with a long-term goal in mind

2 (https://www.searchenginejournal.com/seo-guide/search-authority/)
3 (https://support.google.com/webmasters/answer/7643011)
4 (https://support.google.com/webmasters/answer/7643418)
5 (https://www.webopedia.com/TERM/B/Black_Hat_SEO.html)
6 (https://www.webopedia.com/TERM/B/Black_Hat_SEO.html)
- **PageRank**: Google’s measure of your website and its content, and how you should rank in relation to other sites of similar content.

- **Link Farms**: An SEO tactic of reciprocal linking between a network of websites to artificially boost page rank. Google views link farming as spam and punishes link farm sites by dropping page rank or even removing the site for a time.

- **Search Console (Google)**: A service for your website that allows you to manage and understand visibility of content on your website in Google’s search engine results.

- **URL Inspection Tool**: A way to test individual URLs to find errors, see that a page will be indexed or request Google to crawl a page.

- **Real Estate Standards Organization (RESO)**: An independent, not-for-profit trade organization that actively develops, adopts and implements open and accepted data standards and processes across all real estate transactions.

Interested in learning more? Check out the Search Engine Optimization Starter Guide from Google.

**Knowing the Numbers**

In addition to understanding the terminology of SEO and the basics of what would be added to listing detail pages, it is also critical to determine where efforts are best placed in achieving optimal results. Below, a graph lays out comparisons of traffic market share between the top search engines in the United States.

As you can see, Google dominates the online marketplace with more than 87% market share, dwarfing Bing at 7% and Yahoo at 4%. While this doesn’t mean your marketing plan should ignore the others, as they may have niche or cost benefits, it does mean that we will focus primarily on Google for any advantages or consequences created by a change to listing attribution.

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7 (https://en.wikipedia.org/wiki/PageRank)
8 (https://www.techopedia.com/definition/4630/link-farming)
10 (https://support.google.com/webmasters/answer/9012289)
11 (https://www.reso.org/about-us/)
12 (https://support.google.com/webmasters/answer/7451184?hl=en#)
In addition, Google processes more than 40,000 searches every second, totaling over 3.5 billion searches every day\textsuperscript{13}. As a demonstration of the true impact of Google’s presence online, in 2013 Google went down for five minutes...and global internet traffic dropped by 40%!\textsuperscript{14} Organic versus paid search matters too, as clicks based off paid searches make up less than 3% of all search clicks on Google.\textsuperscript{15} While pay per click is an important part of most marketing strategies, ranking higher organically can drive even more opportunities.

IDX, by all measures, has been a wildly powerful and successful tool in creating enormous amounts of online exposure for properties and generating millions of leads from that exposure. It also means that changes of any size will have wide-spread effects across the network.

For a more localized example of that kind of network effect, Midwest Real Estate Data, LLC (MRED) services a marketplace of more than 6,400 brokerages and over 45,000 individual customers, approximately 3% of the National Association of Realtors\textsuperscript{16} and 2% of the overall real estate licensee network\textsuperscript{17}. In just this local network, more than 11,000 IDX sites are populated with data collected by MRED, which is approximately a 25% adoption rate among MRED subscribers. Many other MLSs also report similar IDX adoption rates in their marketplace.

\textsuperscript{14} (http://www.internetlivestats.com/google-search-statistics/)
\textsuperscript{15} (https://www.cnet.com/news/google-goes-down-for-5-minutes-internet-traffic-drops-40/)
\textsuperscript{16} (https://moz.com/blog/state-of-searcher-behavior-revealed)
\textsuperscript{17} (https://www.nar.realtor/research-and-statistics/quick-real-estate-statistics)
Proposed Policy

Glenn Kelman from Redfin identified listing attribution as a growing concern and he has discussed, via conferences and other communications, varying ideas on how to solve this problem.

Redfin’s latest proposal is essentially this: Add listing attribution on every IDX site in the form of a linkback to the listing agent/brokerage’s website.

Redfin’s suggested text for policy:

In every form of digital media where listing content is displayed, the MLS shall require all third-party aggregators to include: (i) prominent attribution to the listing broker as the source of the Listing, in a form and format that is approved by the MLS (and with any revisions to the form of attribution to be approved by the MLS in each instance); (ii) a Linkback to the listing broker’s website for the Listing; and (iii) solely with respect to sold Listings, a Link to a website provided by the selling broker, if any.

With respect to different forms of digital media (now known or developed later), the MLS shall require that all third-party aggregators ensure the Link is provided in a manner designed to provide the listing broker and the selling broker, as applicable, with proper attribution, including by recognized search engines. MLSs shall ensure that neither participants nor third-party aggregators alter or manipulate any hyperlinks such that the Link is not readily indexable by recognized search engines, nor shall participants or third-party aggregators otherwise reduce proper attribution for the Listing.

The policy being considered by the MLS Issues and Policies Committee is a modified version of the original text.

MLS Policy Statement 7.58, Internet Data Exchange Policy (IDX):

Policies Applicable to Participants’ IDX Websites and Displays...

12. An MLS participant’s IDX display must identify the listing firm in a reasonably prominent location and in a readily visible color and typeface not smaller than the median used in the display of listing data. Participants shall include: (i) prominent attribution to the listing broker as the source of the listing content; and (ii) a prominent, followable, search engine indexable, plain-html hyperlink (each, a “Link”) directly back to the listing broker’s website for the listing. Participants shall ensure that the Link is provided in a manner designed to provide the listing broker with proper attribution, including by recognized search engines. Participants shall not alter or manipulate any Link such that the Link is not readily indexable by recognized search engines, nor shall Participant otherwise reduce proper attribution for the Listing.

MLS Policy Statement 7.87 – Transmittal of Participants’ Listings to Aggregators Policy

(New Paragraph) The MLS shall require all third-party aggregators to identify the listing firm in a reasonably prominent location and in a readily visible color and typeface not smaller than the median used in the display of listing data, including: (i) prominent attribution to the listing broker as the source of the listing content; and (ii) a prominent, followable, search engine indexable, plain-html hyperlink (each, a “Link”)* directly back to the listing broker’s website for the listing. Third-party aggregators shall ensure that the Link is provided in a manner designed to provide the listing broker with proper attribution, including by recognized search engines. Third-party aggregators shall not alter or manipulate any Link such that the Link is not readily indexable by recognized search engines, nor shall third-party aggregators otherwise reduce proper attribution for the listing.

*MLSs are not responsible to enforce this rule against third-party aggregators unless a Link is provided by the listing broker.

Model Virtual Office Website (VOW) Rules for MLSs

Section 19.18(a): A Participant shall cause any listing that is displayed on his or her VOW to identify the name of the listing firm and the listing broker or agent in a readily visible color, in a reasonably prominent location, and in typeface not smaller than the median typeface used in the display of listing data.

(b): Participants shall include: (i) prominent attribution to the listing broker as the source of the Listing content; and (ii) a prominent, followable, search engine indexable, plain-html hyperlink (each, a “Link”) directly back to the listing broker’s website for the Listing. Participants shall ensure that the Link is provided in a manner designed to provide the listing broker with proper attribution, including by recognized search engines. Participants shall not alter or manipulate any Link such that the Link is not readily indexable by recognized search engines, nor shall Participant otherwise reduce proper attribution for the listing.
Below are sample screenshots of how this is displayed now and how it could be displayed with a new policy implementation*.

Current IDX Display on Listing Detail Page

Proposed IDX Display on Listing Detail Page

*(These are not official images and are for demonstration purposes only.)

In the proposed IDX display, a hyperlink to the listing brokerage website is placed in close proximity to the listing brokerage. The hyperlink would be in plain HTML, meaning that it would be the easiest format for search engines to crawl and index. Ideally, this would identify to search engines that the listing brokerage website is the authoritative source of that listing and should be rewarded with an increase to the listing brokerage’s SEO and its ranking in search results.
Legal Analysis

This practice of listing attribution will mimic the creative attribution you see in design, media and other creative content online. It is a common and well-accepted practice to provide attribution through a linkback to the creator of content that is being repurposed for commercial or informational purposes. For example, many companies across the world utilize the Creative Commons License Agreement\(^{19}\), which states that attribution best practices include a “hyperlink to the Licensed Material” and “Identification of the creator(s) of the Licensed Material.” The latter in particular is similar to the current IDX policy of naming the listing brokerage.

Not all consequences would be technology-oriented. November of 2018 sees the end of the 10-year consent decree between NAR and the DOJ around VOW policy.\(^{20}\) Significant changes to the IDX policy, particularly if they affect VOWs, are likely to trigger additional scrutiny.

Because the policy would seek to regulate negotiations with portals and vendors who are not part of IDX, it could be subject to scrutiny under the antitrust laws. The policy would restrict an element of competition, leveling the playing field for brokers who may have identified ways to enhance their SEO through their MLS or their own means. Under the antitrust doctrine of the ‘Rule of Reason’\(^ {21}\), we would want to evaluate whether the policy would ultimately increase or decrease competition. Would it increase or decrease home seekers’ costs? Would it enhance competition among agents and portals? It remains unclear whether competition would benefit, particularly because it is not known how it will actually affect SEO.

Requiring MLS organizations to negotiate identical contracts with syndication portals, as has been discussed as part of this policy, would certainly raise eyebrows. This ventures into even more dangerous territory if data is withheld until such clauses are agreed to, and that practice is used by all MLS organizations. Free and open data was a topic of debate recently in Washington DC\(^ {22}\), and restriction of data would bring this conversation to the forefront again. Forcing an MLS to include such a provision, especially if their market is not widely in favor of it, may also cause a run on early long-term contract renewal to be able to put off policy implementation.

During the CMLS 2018 Legal Session in Orlando, FL, some concerns were expressed by the audience during a panel discussion of this policy proposal. Several NAR representatives including NAR General Counsel assured the audience that multiple attorneys have been consulted to evaluate antitrust issues and they felt this policy would not be anticompetitive. Questions from the audience followed as well as informal discussions afterward among attorneys in the industry. The key legal concerns that MRED has concern the following:

- SEO ranking is currently a competitive advantage for some brokerages and third-party websites. This policy would constitute an agreement among competitors to change the nature of this element of competition. If this results in a clear pro-competitive outcome (reduced prices,

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\(^{19}\) (https://creativecommons.org/licenses/by/4.0/legalcode)
\(^{21}\) (https://definitions.uslegal.com/r/rule-of-reason/)
\(^{22}\) (https://itif.org/events/2018/04/05/using-technology-make-real-estate-more-competitive)
enhanced services, increased choice, etc.) then there should be no issue. However, many feel prices will increase since it will take a financial investment to implement these changes. Additionally, the consumer experience might be diminished, as many brokerage websites are much lower in quality than websites that currently rank highly in search engines. If consumers follow these links, they could have a diminished online experience.

- Many brokerages and MLSs compete when negotiating agreements with portal websites and this policy would constitute an agreement among competitors not to negotiate on an element of their agreement (i.e. portals would either be required to include specific terms in their agreements or they would not do business with MLSs affiliated with NAR).

- If this policy applies to VOWs, there are concerns that the parity rule (brick and mortar brokerages are treated the same as online brokerages) would be in jeopardy. Brick and mortar brokerages may print out a listing and give it to a client with only the brokerage name in text on a paper but website links behave differently because their purpose would be to drive consumers directly to competing brokerages’ websites.

**Technical Analysis & Financial Impact**

Having an opt-in policy, especially to begin, would ease the pain of transition and give time for the real estate community to budget resources for this new policy. Allowing for opt-ins could potentially diminish overall effectiveness, so a balance between adoption and transition would have to be created.

A policy of this nature would be no small undertaking. Tens of thousands of brokerage owners, many without in-depth technical knowledge and resources, would have to be educated and guided in taking on these changes. Could there be issues with an implementation that results in this many new links? A few technological consequences that could arise from a policy implementation such as this are listed as follows:

- Fields to accept these links will have to be created by MLS, brokerages and vendor partners in a coordinated manner or the result will be broken links on broker websites.

- Brokers, IDX / VOW vendors, MLS systems and portals will have to alter the vast majority of pages on their site (as most are focused on search and listing detail pages) to accommodate. Development time and costs will be incurred, with those costs being passed on to customer (the broker) in most cases.

- While adding a field/link may sound simple on its face, this change will affect every property detail page on a site. For most sites, this change will be spread over thousands of pages that will create opportunity for bugs and issues. Less than two months from policy approval to implementation will not provide enough time for this to be properly communicated to all
involved, let alone for page redesign, development, testing and deployment.

- Some brokers do not want thousands of additional links effecting traffic to and from their site, for a variety of reasons (server costs, concerns of Google changing rankings, poor design implementation, etc.).

- Brokers may have to resubmit or appeal to Google’s Search Console if they have a negative impact on individual PageRank, which they may not have knowledge or resources to do.

What is the Anticipated SEO Outcome?

Are these White Hat23 or Black Hat24 SEO tactics? Do those linkbacks prove the authoritative source25 to be the listing agent/brokerage who has procured that listing and made it available via IDX? Or, do those linkbacks to potentially thousands (or even millions) of different sites create a link farm26, damaging SEO for all involved?

MRED consulted with several SEO experts. It all comes down to what passes PageRank (how Google ranks websites in their search engine results, as they are the dominant search engine). If a brokerage website has a large number of high-quality links to it from other sources, it may greatly increase the brokerage’s PageRank. A high-quality link, while not exactly defined, refers to similar content on a more trafficked site pointing to your unique content.

PageRank cannot be passed through paid advertising links, if the nofollow27 attribute is added, or if the page is blocked through robots.txt28 (defining for Google that a page doesn’t need to be crawled). There is some controversy around whether JavaScript passes or not, with Google saying it does but SEO consultants seeing differing results. Other search engines have much more difficulty in measuring JavaScript29 for their algorithms. The chart below shows one SEO consultant’s study into the indexing of JavaScript links among various search engines. Using plain HTML links would be the more reliable option, for all search engines.

As seen in chart: HTML5 (the first column) is the only programming methods compatible with the seven providers listed. Therefore, the proposed policy language specifies a “plain-html hyperlink” and contains the prohibition, “Participants shall not alter or manipulate any Link such that the Link is not readily indexable by recognized search engines.” The other programming methods listed in the chart have varying ways to generate links. As shown, search engines cannot always read links generated by alternate programming languages.
Among brokerage IDX sites, link exchanging\(^{30}\) (the practice of ‘you link to me and I link to you’) may be an issue with cross links of similar content between thousands of sites in a short time frame. Google may also recognize this as useful, relevant and similar content, that is to be expected to be cross linked. Unfortunately, Google keeps their algorithm secret and changes it constantly. It is entirely possible that it may be seen as beneficial initially, Google changes what matters in their algorithm with no notice, and we all go back to the drawing board.

Questions that should be more thoroughly vetted include:

- What rules apply to the proposed link on IDX websites?
  - Would agent websites be in compliance?
  - Would links to homepages or agent profiles be acceptable if they did not link back to the initial property link the consumer followed?

- Who decides what link is provided to the MLS for distribution through the IDX - the brokerages, the MLS, or NAR?
  - MLS customers are the brokerages. If brokerages are against sending or adding these links (as several of the top brokerages in the Chicago marketplace are), does the MLS want to make a judgement call against the wishes of their customers?

- For the actual link delivery process, would the brokerage be responsible for getting that link to the MLS for distribution to IDX?
  - Would it be up to the MLS to proactively pull in those links?

\(^{30}\) [https://seo-hacker.com/link-building-tutorial-link-exchange/]
These details are important to how this policy would be carried out and what the ultimate success (or not) could be.

Implementation would most likely be best handled through an additional resource field or category through The Real Estate Standards Organization (RESO) API distributed by the MLS. Brokers would then add the appropriate link during listing input if the link is specific to a listing brokerage’s property detail page or listing agent. It could be a general field within an office or agent resource at the MLS level if the brokerage wants to include the same general link on all properties distributed through IDX.

RESO is still developing URL standards and will not be part of the upcoming 1.7 Data Dictionary release, but having a standard for this link gathering and delivery will be critical to mitigate future development costs for ingesting and displaying these new links as each technology vendor would develop to the same specs. A RESO standard for this field would most likely be considered and released in 1.8.

The Conclusion

Before policy approval, NAR (or potentially RESO) should deepen conversations with Google at a high level to research best practices and get assurances on a future plan of action. This would limit potential broker anxiety around what effect policy changes would have on their individual SEO, further supporting the benefits of the MLS phased implementation approach.

In order to do what’s best for the industry as a whole, further investigation is needed concerning how compliance would be measured and ensured. NAR’s relationship with its affiliated MLSs helps with implementation of policy, while MLS organizations without NAR ties should investigate the potential value for their members. Is this still successful without 100% adoption, or can the policy be reciprocal for display of links?

Updating the IDX policy to include links for listing attribution carries the potential for enormous benefit to listing brokerages if executed correctly. Consequences, both known and unintended, exist and should be researched, with experts in the Search Engine Optimization field and from search engines themselves being consulted prior to any decisions. Education to policy voting members must be extensive and detailed to proactively mitigate any negative consequences and to help the industry make the proper decision for the next decade of IDX.