

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Duration Media LLC
Petitioner,

v.

Rich Media Club LLC
Patent Owner.

Case IPR2023-00953
U.S. Patent 11,443,329

DECLARATION OF ALAN EDWARDS

Duration Media v. Rich Media Club
IPR 2023-00953 (Patent 11,443,329)

Rich Media Club Exhibit **2027**

1. My name is Alan Edwards. I have personal knowledge of the facts set forth in this declaration and, if called to testify, could and would testify competently as follows.

2. I was a Co-Founder of Rich Media Club, LLC (“RMC” or “Rich Media Club”). I contributed to and am listed on an inventor on several patents assigned to Rich Media Club, including U.S. Patent No. 11,443,329 (“the ’329 Patent”). I was also a Co-Founder of a RealVu, LLC (“RealVu”), a company set up to commercialize the patents held by RMC. RMC licensed its patents to RealVu.

3. During the time I worked with RMC, the company invented a method and system for testing whether ad space on a web page was in, partially in, or nearing the portion of a webpage that was actually visible in a user’s web browser, and delivering the ad when this determination was made. The invention made use of the visibility determination by selling the visible ad space – or ad space that was approaching visibility – as ad space that was more valuable than ad space that was not expected to be (or wasn’t) within the viewable portion of user’s browser.

4. I lived in New York City in the late 2000s and early 2010s, and part of my job with RealVu was to promote the adoption of RealVu’s technology within the digital advertising industry.

5. Two industry-wide organizations have played and continue to play leading roles in setting industry-wide standards that advertisers and publishers can rely upon. An industry trade group, the Interactive Advertising Bureau, or IAB, describes itself as follows:

The Interactive Advertising Bureau (IAB) empowers the media and marketing industries to thrive in the digital economy. Its membership comprises more than 700 leading media companies, brands, agencies, and the technology firms responsible for selling, delivering, and optimizing digital ad marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing. In affiliation with the IAB Tech Lab, IAB develops technical standards and solutions.

<https://www.iab.com/our-story/> (A true and correct copy of the webpage is attached as Ex. 2033). With the possible exception of the exact number of members, that description also fairly described the IAB in the 2005-2015 time period. It was one of the leading trade groups with hundreds of members throughout the advertising industry, including the digital advertising industry.

6. A second group, the Media Ratings Council, or MRC, describes itself as follows: “The Media Rating Council (MRC) is a not-for-profit industry self regulatory body, established in 1963 at the request of US Congress, that audits and

accredits media measurement products and data sources across Digital, Out-of-Home, Print, Radio, Television, and cross-media products.”

<https://www.mediatingcouncil.org>. (A true and correct copy of the webpage is attached as Ex. 2034.) That description also fairly described the MRC in the 2005-2015 time period. It was the leading self-regulatory body for establishing media measurement standards and accrediting companies seeking to comply with MRC standards.

7. Once adopted, compliance with MRC standards is commercially necessary for advertisers, publishers, and other companies in the advertising industry. Advertisers, in many cases, will not pay publishers for ad space that is not compliant with MRC standards, and publishers find it difficult to charge for ad space that is not compliant with MRC standards.

8. Part of my job at RMC involved reviewing MRC and IAB policies and publications, and interfacing with both organizations to create new standards around the technology and measurement we created. I worked directly with Ernst & Young in tandem with the MRC and IAB to create the new viewability audit guidelines, as no one in the industry had seen this technology before we introduced it. I thus have first-hand knowledge of the development and implementation of policies adopted by the MRC as they relate to digital advertising.

9. Before RealVu's invention, there were several ways internet web sites charged for ads that appeared on their sites. Sometimes publishers used "clicks", where advertisers would only be charged each time a user clicked on an ad. Another common approach was to charge for something typically called an "impression." The impression, and CPM (cost per 1000 impressions), has historically been the baseline advertising measurement for ad sales. An impression is defined as the number of times an ad reaches a person, including duplications. Before RealVu's technology the best measurement available for the impression online was to look at the server logs and measure the amount of times the ad file was "served" or "called" from the server. Impressions were measured regardless of whether the ad actually came into view on a view's screen. Prior to 2009, impressions were also sometimes referred to as "views" even though there was no test to determine if the ads had, in fact, been viewed. This language may have come from a common metric of internet website usage known as a "page view," which referred to whether a webpage had been called by a browser, not whether it was viewable by a user. After inventing our technology we found at least 14 reasons why an ad measured as served may not actually appear on the viewer's screen. Some of these reasons include the ad loading on an area of the webpage not visible to the user (below the fold), the user abandoning the web page after the ad

was called but before the ad could load and render to the viewer, non-human agents (bots) calling the ads, etc.

10. What the industry called an “impression” in the early 2000s would later come to be called a “served impression.” As the name implies, “served impressions” are ad impressions known to be *served* by a server; it is not known, however, whether a served impression ever came within the viewable area of a user’s browser. Served impressions would later be distinguished from “viewable impressions,” which are ad impressions known to be actually *within the viewable area* of a user’s internet browser. This term was introduced by EY during our first audit of the metric, as they needed some way to distinguish our impression from the existing served impression which guidelines had already been created for.

11. I understand that Dr. Trevor Smedley is of the opinion that another RMC patent, No. 10,380,602 with a May 16, 2007 filing date, discloses the use of a viewable impression because the patent states: “advertisers and ad publishers would benefit greatly from having an ad space exchange system where publishers can make available their ad space/impression/view inventory.” Paper 1 at 20 (citing Ex. 1002 at 3:7-10). Dr. Smedley is wrong. Use of the phrase “ad space/impression/view inventory” did not disclose a “viewable impression.” RMC had not yet invented its own test for viewability when the ’602 patent was applied for in 2007. RMC’s viewability test would not be invented until 2008, so it

cannot be the case that RMC's 2007 patent application disclosed a test for viewability when no one at the company (or anywhere else) had yet invented a test for viewability. My understanding of the phrase "ad space/impression/view inventory" as used in the '602 patent means what is referred to today as "served impression" inventory.

12. Around the time of the '329 invention and in the years immediately following the invention, as we introduced the invention and our reports of initial trial results, there was increasing interest within the internet advertising industry to develop a different metric than the served impression for charging for ads on the internet. The interest reflected, among other things, the concern that publishers were charging for – and advertisers were paying for – ads that never came within the viewable space of a user's browser. Charging advertisers for ad that were served (served impressions) but which never became viewable was proving to be an impediment to more widespread advertising on the internet. In fact, our trials revealed that almost half of ads measured as served were never actually appeared to a viewer, and these numbers dropped as low as 8% for automated advertising exchanges. Obviously, in a \$40 billion industry, these numbers were alarming.

13. In 2008, I and four of my colleagues at RealVu invented a reliable test for determining whether an ad was within, on the edge of, or nearing the viewable area (or viewport) of a user's browser. We continued to work on improving the

technology and filed for a patent on the invention in 2009 through a continuation-in-part patent application.

14. One use of the technology was to provide a test or confirmation for whether a “served impression” had actually become a “viewable impression.” We started to demonstrate our technology to industry leaders, including meetings with Joe Lazlo and Jeremy Fain at the IAB, with David Cohen, who is now the Chief Executive Officer of the IAB, and Adrian D’Souza, then the Director of Media Revenue Operations at Google.

15. I have a distinct memory of the meeting with David Cohen. His reaction to our demonstration was memorable. He did not believe that the technology to determine whether an impression was viewable existed, and he was visibly impressed by our demonstration of RealVu’s technology. He immediately understood the potential game-changing nature of our technology and he wrote a contemporaneous blog post about the meeting.

16. I have reviewed Exhibit 2024, which is a copy of the blog post David Cohen wrote in November 2009. Exhibit 2024 is a true and correct copy of the post, and this version obtained from the website www.mediavillage.com. The post corroborates my independent memory of the meeting and ensuing blog post. I am particularly familiar with the blog post because it became part of RealVu’s marketing material and we referred to it many times in business meetings.

17. The blog states that Mr. Cohen was the Chair of the AAAA Interactive Marketing Committee and the co-chair of “Project Reinvention.” The AAAA – or 4As – is another ad industry trade group, the American Association of Advertising Agencies.

18. In his capacity on the 4As committee and Project Reinvention, I knew Mr. Cohen was focused on problems with internet ads, and we met with him to demonstrate our technology. After the meeting, wrote the blog post starting with the following statements: “Have you ever had a meeting with a potential business partner the rocked your world? Something that called into question everything you believed to be true? I recently had one of those meetings and wanted to share it.”

19. The rest of his post explains not only what RealVu had demonstrated, but how RealVu’s invention had the potential to change the very basis on which publishers would charge for internet ads:

We certainly don't need any more Wall Street Journal articles on “Invisible Ads” or trade publications exposing the dangers of ad networks, click fraud, below the fold placements, etc. So, you can understand my dilemma after I met with RealVu last week. Part of me wanted to forget that the meeting ever happened. The other part of me thought that this little known Salt Lake City startup could change everything.

It would appear that (among other things) RealVu has developed a technology that allows them to identify when an online

ad is “within the viewable area” of a user's screen, and for what duration. So, for ads that are run on a particular Web site that require a user to scroll “below the fold,” their ad never gets requested until the user has scrolled to that part of the page. Makes sense, right? Pretty innocuous you say?

On average, across all placements that they have tracked – fully 50% of online ads are never viewed because they are outside of the user’s viewable area. *Say what?*

Now, keep in mind this is a combination of all properties. Some long tail sites are poorly constructed and they may indeed have questionable motives, but this does include Top 100 properties as well. The number of ads that we are paying for that go unseen floored me.

In addition to making sure that an advertiser is only charged for an ad that is viewed by a user, they are able to see how long the ad is viewed before it leaves the viewable area (another tab is opened in the browser, user scrolls down the page, etc.).

It is not inconceivable that this kind of data will drive the industry towards an entirely new buying mechanic. Only paying for the amount of time that an ad is viewed, and obviously not paying for ads that are not viewed at all. This may very well translate into a decrease in efficiency (or an increase in CPM), but it will be a far more accurate representation of true ad delivery. We are supposed to be the most measurable and accountable medium, right?

RealVu has reportedly signed a deal with MSNBC.com to start working with them to provide their service to advertisers. They also have been working with some of the leading industry bodies like the

IAB and the Media Rating Council (MRC) to revisit some of the very foundations of our industry, like what qualifies as an ad impression.

I have no doubt that this will not be the last time we hear about this company nor the last time we discuss the potential to revise the currency of Internet display advertising. Might this be the catalyst the industry needs to galvanize around a new standard metric?

Engagement, iGRPs, Brand minutes, involvement score – take your pick. The possibilities are as varied as they are exciting.

At the end of the day, if this new potential standard makes the business of doing business easier and more transparent, I believe it will be a giant step forward for the industry. It will set a new bar for accountability – one that will influence all communications channels, including the 800 lb. gorilla in your living room.

Remember folks, you heard it here first.

This could change everything.

Ex. 2024 - Curious Thoughts from Curious Minds: This Could Change Everything

- David Cohen - MediaBizBloggers| MediaVillage (emphasis in original).

20. I recall, in 2009, getting our first meeting at the IAB to introduce our metric and share our reports. Our first meeting was with Joe Lazlo, who at the time was the director of research at the IAB. I recall him being a bit taken aback by the reports (50% of ads not viewable is a big deal). The IAB had never seen anything like what we showed them before.

21. Another of my responsibilities at RealVu was to work with the MRC to provide accreditation for the RMC/RealVu viewability solution. At the time,

neither the MRC nor any other organization were providing accreditation for a test for viewable ad impression because no such test existed. When we presented our technology to George Ivie and David Gunzerath in their NY office, George was visibly fascinated. He expressed that he never saw anything like this before, and if the technology really worked, it would change the future of digital measurement forever. George encouraged RealVu to become accredited by the MRC. And subsequently, we also RealVu participated in developing the very *standards* for MRC accreditation. Working with the accounting firm Ernst & Young, a consultant to the MRC, RealVu guided Ernst & Young through the various challenges to a reliable viewability test.

22. At the end of this process, RealVu's viewability test/technology was accredited by the MRC. I have reviewed a copy of the letter the MRC sent to me as the Executive Vice President of Rich Media Worldwide, LLC (another company affiliated with RMC and RelaVu) marked as Exhibit 2017 and can confirm that it is a true and accurate copy of the letter. I understand that it was retrieved from RMC's/RealVu's regularly kept business records.

23. We issued a press release after receiving the accreditation, and I found a copy of the press release on the Internet Archive for Reuters. A true and correct copy of the press release as found on the archived Reuters website is submitted as Exhibit 2042. The exhibit refreshes my recollection of the content of the press

release that was issued and the quotations were able to obtain about our accredited technology.

24. RealVu was the first company to receive accreditation from the MRC for a test for viewable ad impressions. I know this based on my personal experience, but I have also reviewed statements made by the then President of the MRC, George Ivie. For example, I have reviewed an article from the website Volunteer Landing. Exhibit 2035 is a true and correct copy of the article from the website.

25. In the article, Mr. Ivie is quoted as saying “RealVu essentially invented viewability.” I have a specific recollection that Mr. Ivie made that statements because, like the David Cohen article, we would use Mr. Ivie’s comment in our efforts to generate business for RealVu. We were proud of our contributions in the creation of the viewable impression and appreciated Mr. Ivie’s recognition of our contributions.

26. The availability of RealVu’s reliable viewable ad impression test coincided with industry frustration with the served impression model. For numerous reasons, the model of charging for served impressions was under intense industry pressure to be replaced. Advertisers were learning that that were regularly being charged for ads that could never be viewed, and they were restraining their purchase of internet based ads for that reason.

27. After the MRC accredited us in 2010. We were officially the first company to be accredited for the viewable impression, and now the industry could not look away anymore. They had to do something. They couldn't just stand by now that there was proof that so many ads measured as impressions just didn't appear.

28. In addition to the IAB and the MRC, two other advertising industry trade groups are well-known and have a national presence: the American Association of Advertising Agencies ("4As") and the Association of National Advertisers ("ANA"). The need to address the viewable impression issue was so strongly felt that major industry organizations – the IAB, the 4As, and the ANA – came together to form a coalition to move the industry from a served impression standard to a viewable impression standard. The trade groups created a special-purpose organization they called "Making Measurement Make Sense" or "3MS" and hired Bain and Company to head the project. Among other activities, the 3MS initiative determined that the MRC would be the independent entity that would develop, test, and institutionalize the viewable impression standard.

29. We were asked to assist Bain and Company in creating their reports, and powerpoints were shared with me which we commented on and added input. I had a number of meetings with Bain and Company on the 3 MS initiative. I have reviewed webpages available using the Wayback Machine/Internet Archive

associated with the url measurementnow.net. Several of these pages were printed out and marked as exhibits 2029, 2030, 2031, and 2032. I confirm that exhibits 2029, 2030, 2031, and 2032 are true and correct copies of the corresponding pages available on the Internet Archive.

30. I can also independently confirm that the pages available from the Internet Archive are consistent with my memory of what the website for the Making Measurement Make Sense initiative looked like in the 2012 time frame. RealVu had high interest in the Making Measurement Make Sense initiative and cooperated with their efforts, because the adoption of a viewable impression standard was expected to generate business opportunities for RealVu, and I recall visiting the website to see how the IAB/ANA/4As/MRC group was describing the 3MS program.

31. I also recall George Ivie setting up a meeting with Adrian D'Souza, at Google August of 2010. On this call we introduced the metric and technology and George expressed that we were creating the new viewability guidelines. I recall Adrian's reaction being quite terse. He gave no indication that they had this kind of technology and expressed in no uncertain terms that Google was not interested in pursuing this metric. He said to George that the served impression guidelines had just been revised and there was no reason to go in this direction. Google did not follow up after this call.

32. We had meeting at Microsoft and MSNBC very early on, and they too, had never seen this before. Over time I showed the technology to most publishers, (ESPN, Thompson Reuters, Yahoo, ABC, CBS, etc. , Verification and measurement companies, (Moat, Double Verify, Compscore, Neilson etc) and Agencies, (Digitas, Omnicom, Publicis, Horizon Media, Universal McCann, GroupM, etc.).

33. In 2011, I attended a conference sponsored by the IAB and attended a panel discussion entitled “Viewability Panel – Iab Ad Ops Summit 2011.” A portion of the panel discussion was recorded and is available on YouTube at <https://www.youtube.com/watch?v=c5SS27qVhkw>. (Close-captioned screen shoots from the video are included as Ex. 2036.) Part of the discussion that I recall that was not part of the YouTube presentation was the initial introduction by George Ivie. During that introduction he mentioned his initial meeting with RealVu, and how it was the first time he was introduced to viewability. The remarks I recall were cut from the beginning of the video but they are evident from the comments of others that are part of the recording.

34. Two of the panelists comment on their earlier meetings with RealVu. The first, David Cohen, confirms what he wrote in his blog post: “So I met with, uh, real view [sic: RealVu] just about the same time that George [Ivie] did, I think. Was equally kind of astounded and kind of put it in the category of too hard to deal

with and pushed it to the side. But I think that its back with a Vengeance and And we have to kind of address it.” The second, Julian Zilberbrand, stated “I met with real view [sic: RealVu] about the same time you did. Also very impressive,” at which point George Ivie interrupts saying they were “getting around, and Julian agrees, “they were getting around.” Reviewing the video refreshes my recollection of the conference that all three panelists had commented on how RealVu’s demonstration of its technology “impressed” or “astounded” them.

35. While RealVu had invented a viewable ad impression that was the first solution accredited by the MRC, other so-called “solutions” did not work as reliably as the method developed by other companies. Despite wide-spread industry interest in replacing the *served* impression model with a *viewable* impression model, the MRC took the extraordinary action of issuing an “advisory” *against* using viewable impression technology.

36. I have reviewed a copy of Exhibit 2018, which is a copy of the advisory the MRC issued. I have compared Exhibit 2018 to the press releases maintained on the MRC website, and confirm that Exhibit 2018 is a true and correct copy of the letter the MRC maintains at the url <https://www.mediatingcouncil.org/sites/default/files/News/Audit-activity/VIEWABLE%20IMPRESSION%20ADVISORY%20November%2014%2C%202012.pdf>. Given its impact on RealVu’s business, I have a distinct

memory of reviewing the MRC's advisory and confirm that Exhibit 2018 is a true and correct copy of the document I first reviewed in 2012.

37. The MRC advisory regarding viewable impressions in 2012 was well-known throughout the internet advertising industry.

38. The MRC advisory states the condition of viewability tests as of the date of the advisory, November 14, 2012:

Several vendors – including ad servers, verification services and third-party syndicated measurers – have developed solutions for determining whether served ads become viewable and to count ads based on viewable parameters. Based on large-scale tests of real advertiser campaigns as detailed within, while capabilities vary, the ability to consistently measure whether impressions are viewable is a challenge that must be overcome by most of the vendors before finalizing a new online advertising currency definition. The number of impressions in a campaign for which viewability cannot be determined is often significant.

39. Exhibit 2018 includes discussion of the “*VIEWABLE IMPRESSION AGENCY PILOT TESTING SUMMARY*.” In the summary, the MRC explains both the background that led to the study and the results of its testing with real advertisements:

BACKGROUND

In spring 2012, MRC, with the support of the entire ecosystem as represented by the member companies of the ANA, 4A's, and IAB,

and the Board of Directors of the MRC, took on the leadership of efforts to transition digital display advertising to a viewable impression transactional currency. The proposed criteria or standard for viewability, recommended by the industry leaders who participated in Making Measurement Make Sense (3MS), is at least 50% of pixels in view for a minimum of one second.

The 3MS initiative envisions viewable impressions as the foundational element in the development of transparent and consistent metrics for display advertising. The intention of the 3MS initiative is to define metrics that work for brand advertisers and permit facile cross platform media planning, buying and evaluation. In addition, the 3MS leadership supports the expansion of the MRC into the foremost standards development institution for all media.

TESTING VIEWABILITY WITH REAL ADVERTISER FLIGHTS

MRC oversaw pilot tests of viewable impressions using real advertiser campaigns in live production environments that ran during May and June 2012. In total, twenty-two campaigns representing more than three billion served impressions¹ [Served impressions are the current industry standard, used for the selling and buying of digital display.] were examined. Seventeen advertisers and twelve agencies were involved. The ad campaigns ran in a variety of environments and deployed inventory purchased both directly from publishers as well as from network sales channels. The only requirement that was imposed across all the campaigns, regardless of agency, advertiser brand or target audience, was that the agency ad servers used to serve the pilot campaigns be MRC accredited.

In addition, five viewability measurement vendors participated in the pilot tests. Each vendor was required to demonstrate in advance of its participation in the pilot its ability to measure or not measure viewability under seventeen different scenarios as defined by the MRC.

40. The Advisory also reported the results of the pilot testing:

PILOT RESULTS

Key findings that have broad implications for the recommended industry action items in this document include:

- Viewable rates for the live campaigns in the test showed tremendous variability, ranging from a high of 78.6% to a low of 7.8%. **Viewable rates are calculated off of a base of impressions that could be measured for viewability.**
- The ability to measure whether impressions are viewable or not is still extremely variable. The test campaigns showed a range of 0% to 77% of **served impressions that were measured for viewability.**
- Cross domain iFrames present a challenge to measuring viewability because they can obscure the capacity to determine whether or not an ad impression is viewable. Cross domain iFrames have an important function in protecting content and protecting undisclosed data collection from occurring on a publisher's site.
- Cross domain iFrames were the reason behind 3/4 of the unmeasured impressions in network placements in the pilot, and

more than 1/3 of the unmeasured impressions in publisher placements.

- Overall measured impression rates across all pilot campaigns were 27% for publisher placements, and 19% across ad network placements.

Exhibit 2018 (emphasis in original). The MRC's study confirmed my own experience: many companies had still not developed a reliable way of testing for viewability. My co-inventors and I had, and RealVu MRC-accredited solution performed markedly better than the "solutions" other companies were promoting.

41. Over the next 18 months, the MRC would issue several updates on its and the 3MS' initiative to introduce the viewed impression as a means of charging for ads placed on the internet. I have reviewed each of the exhibits listed below and their corresponding web page links. Each exhibit is a true and correct copy of what is available at the corresponding link, and each exhibit is a true and correct copy of the updates the MRC sent on the corresponding dates. I have an independent memory of reviewing the updates as they issued.

Exhibit **2038**: Update to November 2012 Viewable Impression Advisory (June 12, 2013) (<https://www.mediaratingcouncil.org/sites/default/files/News/Audit-activity/Viewable%20Impression%20Advisory%20UPDATE%20June%2012%2C%202013.pdf>).

Exhibit **2039**: MRC table regarding the capabilities of MRC accredited viewability vendors (August 1, 2013) (found on the Internet Archive/Wayback Machine at: <https://web.archive.org/web/20140209121508/http://mediaratingcouncil.org/Viewability%20Verification%20Disclosure%20August%201,%202013%20Final.pdf>).

Exhibit **2040**: MRC Viewable Impression Advisory Update, November 20, 2013 (November 20, 2013) (<https://www.mediaringcouncil.org/sites/default/files/News/Audit-activity/Viewable%20Impression%20Advisory%20Update%20November%2020%202013.pdf>).

Exhibit **2041**: MRC Lifts Viewable Impression Advisory for Display Advertising (March 31, 2014) (https://www.mediaringcouncil.org/sites/default/files/News/General-Announcements/033114_MRC%20Viewable%20Impression%20Advisory%20UpdateFINAL.pdf)

42. Like the initial advisory, the MRC's updates explain the continuing challenges many companies experienced to create system capable of confirming that an ad had become viewable. The June 2013 update (Ex. 2038), for example, states that "variability in vendor capabilities remains, but more and more vendors are seeking (and gaining) accreditation/certification from independent 3rd parties, which is resulting in improved levels of disclosure about their relative capabilities.

In the coming days, MRC will make available on its website (www.mediatingcouncil.org) a brief summary of the viewability measurement capabilities for each vendor accredited by MRC for measurement of viewable display advertisements impressions.”

43. The MRC did update its website with the summary mentioned in Exhibit 2038, and I was able to find a copy of the summary using the Internet Archive/Wayback Machine (A true and correct copy of the pages from the internet archive is marked as Ex. 2039). As shown on the summary, RealVu’s solution was the first one accredited by the MRC, in April 2010. The next company would not be accredited until more than two years later, and Google’s Active View solution was not accredited by the MRC until three years after RealVu’s, in April 2013.

44. The MRC issued another update in November 2013 (Ex. 2040) and the final update, lifting the advisory against using viewable impressions in March 2014 (Ex. 2018).

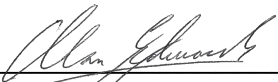
45. As demonstrated by the review of the MRC’s documents and my personal involvement at the time, I conclude the following: (1) RealVu’s solution was the first viewable impression solution to receive accreditation by the MRC in April 2010; (2) RealVu’s demonstrated ability to confirm an ad was viewable was surprising to the industry and led to an industry-wide effort to replace the “served” impression with the viewable impression; (3) only one other vendor had been

accredited by the MRC when it issued the advisory against using viewable impressions in November 2012; (4) internal third-party testing by the MRC testing showed that many so-called viewability solutions did not work in 2012; (5) it would take over a year of additional effort and testing for the MRC to lift the advisory against using viewable impressions.

Signature page follows.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 5, 2023



Alan Edwards